

AGENDA

MILWAUKIE CITY COUNCIL WORK SESSION JULY 20, 2004

MILWAUKIE CITY HALL

Second Floor Conference Room
10722 SE Main Street

WORK SESSION – 5:30 p.m.

A light dinner will be served.

Discussion Items:

	<u>Time</u>	<u>Topic</u>	<u>Presenter</u>
1.	5:30 p.m.	Code Amendment Regarding Penalties for Repeat Offenders	Steve Campbell
2.	5:45 p.m.	Sewer Rate Discussion	Paul Shirey
3.	6:20 p.m.	Adjourn	

Public Notice

- The Council may vote in work session on non-legislative issues.
- The time listed for each discussion item is approximate. The actual time at which each item is considered may change due to the length of time devoted to the preceding items.
- Executive Session: The Milwaukie City Council may go into Executive Session pursuant to ORS 192.660. All discussions are confidential and those present may disclose nothing from the Session. Representatives of the news media are allowed to attend Executive Sessions as provided by ORS 192.660(3) but must not disclose any information discussed. No Executive Session may be held for the purpose of taking any final action or making any final decision. Executive Sessions are closed to the public.
- For assistance/service per the Americans with Disabilities Act (ADA) please dial TDD (503) 786-7555.
- The Council requests that all pagers and cell phones be either set on silent mode or turned off during the meeting.
- For assistance/service per the Americans with Disabilities Act (ADA) please dial TDD (503) 786-7555.



To: Mayor and City Council

Through: Mike Swanson, City Manager
JoAnn Herrigel, Community Services Director

From: Steve Campbell, Code Compliance Coordinator

Subject: Ordinance Amendment 1.12.010 – General Penalty

Date: July 6, 2004

Action Requested

Provide staff with input on a proposed ordinance amendment to Municipal Code Chapter 1.12.010 – General Penalty. Staff suggests these amendments for two reasons:

1. To increase the penalty for repeat offenders, and
2. To clarify that the “general penalty” applies to both civil penalties and fines.

Background

The attached ordinance accomplishes two things. First, it establishes a penalty for repeat offenders. Currently if a citizen violates a Municipal Code multiple times the enforcement policy and general penalty are the same for the habitual offender as they are for a first time offender. Code Compliance staff has researched codes from surrounding municipalities and is recommending that this amendment be made to strongly discourage violators from repeating the same violation. The proposed ordinance sets a higher civil penalty for third and subsequent violations.

The second goal of this ordinance is to clarify the definition of general penalty. The City Attorney has proposed the language in the attached ordinance to show that both fines and civil penalties fall under general penalties. As he has noted, “fines” apply to traffic and parking violations and “civil penalties” apply to non-traffic and non-parking violations. This clarification is a simple housekeeping task.

The proposed amendment addresses the concern for staff time spent on repeat violator cases, residents' peace, welfare, and livability.

By adopting this proposed amendment to the general penalty, it will clearly define the difference between civil penalty and fine. The City will be able to discourage the habitual offender thus helping our citizens enjoy their neighborhood. This proposed amendment meets the Council goal of sustaining livability in the Milwaukie neighborhoods.

Concurrence

The City Attorney has reviewed and commented on the proposed amendment and has provided Code Compliance staff with their input.

Fiscal Impact

No negative fiscal impact on the City is expected from this action. Some additional revenue may be generated by the implementation of the repeat offender clause.

Alternatives

Maintain our current regulations regarding general penalty.

ORDINANCE NO. _____

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MILWAUKIE,
OREGON, AMENDING MILWAUKIE MUNICIPAL CODE CHAPTER 1.12.010 –
GENERAL PENALTY – DESIGNATED**

WHEREAS, Milwaukie Municipal Code Chapter 1.12.010 describes general penalty for persons violating or failing to comply with the Municipal Code; and

WHEREAS, the City's code provides for enforcement of non-traffic code provisions by a civil infraction proceeding with imposition of a civil penalty;

WHEREAS, Milwaukie Municipal Code Section 1.12.010 currently provides for a general penalty in the form of a fine and does not increase the amount for subsequent violations; and

WHEREAS, it is in the interest of the City and its residents to provide a strong disincentive for repeat violations;

NOW, THEREFORE, THE CITY OF MILWAUKIE DOES ORDAIN AS FOLLOWS:

Section 1: Milwaukie Municipal Code Section 1.12.010 General Penalty is amended to read as follows:

- A. Any person adjudged to have violated any of the provisions or to have failed to comply with any of the mandatory requirements of any ordinance of the city, except in cases where a different punishment is prescribed by any ordinance of the city, shall pay a civil penalty (for non-traffic, non-parking violations) or fine (for traffic or parking violations) of not less than one hundred fifty dollars nor more than five hundred dollars.
- B. Each and every day during any portion of which any violation of any provision of an ordinance is committed, continued or permitted by any person shall constitute a separate violation.
- C. The penalty or fine for a third or any subsequent separate judgment of violation of the same offense by the same person shall be no less than one thousand dollars.

Section 2: All subsections of Milwaukie Municipal Code Section 1.12.010 not expressly amended by this ordinance remain in effect.

Read for the first time on _____, 2004 and moved to a second reading
by _____ vote of the City Council.

Read for the second time and adopted by the City Council on _____,
2004.

Signed by the Mayor on _____, 2004.

James Bernard, Mayor

ATTEST:

Pat DuVal, City Recorder

APPROVED AS TO FORM:
Ramis, Crew, Corrigan & Bachrach, LLP

City Attorney



To: Mayor and City Council

Through: Mike Swanson, City Manager
Alice Rouyer, Community Development and Public Works Director

From: Paul Shirey, Engineering Director

Subject: Sanitary Sewer Utility Rate Analysis

Date: June 30, 2004, for July 20, 2004, Meeting

Action Requested

The following issues are being presented for Council review and direction to staff.

- Background on the volume-based sanitary sewer rates adopted in 2001.
- An assessment of the current fiscal health of the sanitary sewer utility.
- The impact on rates if the City were to provide funding for consolidation of wastewater treatment services in Clackamas County (thereby achieving the decommissioning of the Kellogg plant).

Background

In September 2001, the Council adopted the consumption-based sewer rate. Previous to that change every user—regardless of their demand on the system—was assessed the same cost. The change resulted in bills that reflected different amounts depending on a customer's use of the system. In adopting this change in methodology, the Council directed that the revenue impact be neutral.

At the same time as it enacted the new consumption-based methodology, the Council also adopted a modest increase in the rate charged. Thus, even if the fixed rate had remained in effect, users would have seen an increase in their bill, and revenue would have increased.

The new consumption-based methodology and the rate increase were phased in over a 30-month period to reduce the rate spikes that can result when converting to a consumption-based system. The final rate increase took effect in July 2003. From the beginning, customers have complained that sewer rates have gone up too much and have questioned whether the transition from fixed rates to variable rates has resulted in overcollection of sewer revenues.

The current financial health of the sewer utility is addressed based on an analysis completed in May 2004 by Financial Consulting Services Group (FCSG). Some cost impacts to the sewer utility from the potential decommissioning of the Kellogg treatment facility are also evaluated.

1. Why was the basic sewer rate methodology changed from fixed to variable?

Following adoption of a sewer rate increase in February 2000, Council directed staff to determine if a volume-based structure would be more equitable than the flat-rate method (see attached Council Minutes from September 4, 2001). Key issues identified at the time were:

- Conservation should be rewarded and encouraged;
- Billing based on residential customer winter usage is appropriate; and
- Transition to a new structure should be phased in over three years.

In addition to charging a more equitable fee for sewer services, the proposed rates were intended to maintain financial stability for the utility. Finally, the impact on City revenues was designed to be neutral. That is, the transition to a consumption-based system was not intended to generate additional revenue.

2. In addition to developing a more equitable rate structure that recognized differences in customer usage, was there a need for the utility to generate more revenue?

Not initially. As part of the rate design effort, a consultant was retained. The City's consultant, FCSG, completed an analysis and forecast of the financial performance of the sewer utility in June 2001 (attached). The study focused on ensuring that the redesigned sewer rate structure collected revenues sufficient to cover expenses and obligations. The analysis found that the City needed to moderately increase the amount of total revenue collected to sustain the fiscal health of the sewer utility. An increase in revenue beyond that collected under the fixed rate occurred for two reasons.

- a. A moderate increase of 3% was built into the volume-based rates. Even if the flat-rate structure had been maintained, a small increase in customers' bills would have been obvious.
- b. Beyond the 3% increase for all customers, the average sewer customer would see a negligible change in their bill from the flat-rate to the volume-based structure. A below-average customer would see a decrease under the volume-based structure and an above-average customer would see an increase in their bill. These "equity shifts" are the by-product and intent of a volume-based rate structure.

3. Why did Council adopt a three-step phase-in of the rates?

- a. The purpose of the three-year transition was to soften potentially extreme impacts on customers from the change to volume-based sewer rates. Under the flat-rate structure, all residences were paying \$36.25 bi-monthly for sewer service, regardless of the volume they discharged to the system.

- b. For example, a low-consumption household that discharged 6 CCF¹ (almost 4,500 gallons) to the sewer system paid the same amount as a house that discharged 20 CCF (almost 15,000 gallons) to the system. If the rate structure were changed to a volume basis in one step, the bill for a high-volume customer would go from \$36.25 to \$57.00, an increase of over \$20.
- c. Instead, the transition strategy manages that difference in three steps over three years to allow time for customers to either adjust their household budgets or respond by conserving indoor water usage to lower their bill. This three-year transition also meant that customers who had been subsidizing high consumption customers saw their bill decrease over the three-year time frame.
- d. The following tables illustrate the “equity shifts” by comparing three different customers, each with varying consumption patterns.

Three-person household, two adults, one child

	FY 2003/04	FY2002/03	FY 2001/02	Pre-Volume-based
Highest bill of the year	\$120.85	\$132.85	\$131.85	\$106.85
Sewer bill	\$57.00	\$52.80	\$40.90	\$36.25
Winter average ²	20 CCF	22 CCF	17 CCF	21 CCF

Two-person household, two adults, no children

	FY 2003/04	FY2002/03	FY 2001/02	Pre-Volume-based
Highest bill of the year	\$100.60	\$81.10	\$74.35	\$75.80
Sewer bill	\$38.10	\$40.20	\$38.80	\$36.25
Winter average	11 CCF	13 CCF	14 CCF	14 CCF

One-person household

	FY 2003/04	FY2002/03	FY 2001/02	Pre-Volume-based
Highest bill of the year	\$61.30	\$71.45	\$66.05	\$63.65
Sewer bill	\$33.90	\$34.60	\$34.60	\$36.25
Winter average	9 CCF	9 CCF	8 CCF	10 CCF

4. Is the sewer utility collecting more revenue even though volume-based rates were intended to be revenue-neutral?

The sewer utility is collecting more rate revenue than it did in 2001 for two reasons.

- a. There has been a small amount of growth in both the number of customers and the amount of volume they are discharging to the sewer system. The sewer rates, and hence total revenue, are now linked directly to both of these statistics. Volume-based billing will generate more revenue if water consumption exceeds use predictions.
- b. The sewer rates adopted as a part of the three-year transition included moderate annual increases (approximately 4% per year) needed in total sewer revenue in order for the utility to recover all of its annual operating costs and policy requirements (e.g., reserves).

¹ CCF = 100 cubic feet = 748 gallons.

² Winter average is the average amount of water usage during December-March, used to more accurately reflect discharge to the sewer system.

May 2004 projections show that the sewer utility is not overcollecting revenue. On the contrary, the utility requires an immediate small increase (approximately 1.5%) to ensure that its annual revenues equal its annual operating costs and depreciation.

5. Does the manner in which the City accounts for its sewer revenue affect the perception of overcollection?

Probably. The City has three separate sewer-related funds: a) #540 Sewer Operation Fund, b) #550 Reserve for Future Capital, and c) #545 SDC Fund. These funds are intended to serve specific purposes. Due to the City's practice of keeping nearly all revenue in #540, the operating fund, it may appear to the public that the utility is flush with more cash than it needs. The consultant recommends that the City take advantage of the existing fund structure to better designate the purpose and intent of cash reserves. Staff will be implementing these budget recommendations in the FY 2005/06 budget.

- a. Fund #540 can be viewed as the utilities checking account. It is the fund that pays for the daily ongoing expenses of the utility: payroll, employee benefits, and supplies for the maintenance of the sewer utility. Normally this fund should not carry over a large balance, other than a 45-day operating reserve as a safety cushion for operations.
- b. Fund #550 can be viewed as both a savings account and checking account for current year capital projects. The savings account portion collects revenue needed for annual depreciation (a contribution toward replacing the system amortized annually). The checking account portion covers costs for annual capital projects and those planned for in the Capital Improvements Program (CIP) for the coming five-year period. FCSG recommends that much of the fund balance in fund #540 be transferred and reserved in fund #550. A minimum reserve in fund #550 is also recommended for capital cost contingency and/or emergency reserves.
- c. Fund #545 is the account used strictly for system development charge (SDC) revenue. Funds in this account may only be spent for SDC-eligible projects. Eligible projects are those that are the direct result of growth in the utility system and must enhance the capacity of the system. Given that Milwaukie is not currently growing at a rapid pace, use of these funds will likely be limited to annexation or other growth-related projects.

6. During the reexamination of the volume-based rate structure in 2003, why did staff recommend against adopting the third phase of the 2001 rate increase?

In June 2003, even though rate revenue was sufficient to cover existing requirements for FY 2003/04, FCSG made it clear that, beginning in 2004/05, annual rate increases of 2-3% would be needed to meet rising operating costs and the capital funding policy.³ Projected rate revenues exceeded budgeted operating costs at the time of the analysis. Given concerns about perceived "overcollection" of rate revenue since the switch to a volume-based system, staff and FCSG recommended that the utility forego the previously adopted 4.5% increase that was to become effective on July 1, 2003. Council

³ At the time, the sewer fund was not funding depreciation; e.g., the estimated annual expense necessary to accrue a "savings account" that can be tapped to replace capital components (pipes and pumps) of the system as they wear out.

appropriately did not concur with this recommendation and elected to implement the 4.5% rate increase to take effect on July 1, 2003, as scheduled.

7. What is the current fiscal health of the sewer utility, and are rates sufficient to meet required expenditures as budgeted for 2004/05?

- a. FCSG has reviewed and modeled the revenue requirements for the next five years. The model incorporates operating revenues, operating and maintenance (O&M) expenses, capital funding needs, and any other expenditures and revenues associated with the sewer budget. An inflation rate of 4.5% (accounting for inflation in cost of materials and labor) and was determined by comparing past sewer budgets and considering recent higher-than-inflation-level price increases.
- b. Capital needs were estimated based on the current 2004-2009 CIP.⁴
- c. FCSG further recommended that the utility fully fund depreciation as a cash contribution to its capital reserves (fund #550).
- d. Results of the analysis include the following.
 - i. With mild rate increases to keep pace with inflation, sewer rates can generate sufficient revenue to fully fund operating expenses, capital needs, depreciation, and other expenditures associated with sewer operations without the issuance of debt.
 - ii. Beginning with the current FY 2004/05, small increases will be needed to cover inflation. The following table demonstrates the necessary rate increases to meet the needs of the utility.

Table 1
Projected Rate Increases to Remain Revenue-Neutral

	2004/05	2005/06	2006/07	2007/08	2008/09
Annual rate increases	1.46%	4.31%	3.13%	3.11%	3.11%
Cumulative rate increases	1.46%	5.84%	9.15%	12.55%	16.05%

8. If the updated Master Plan predicts a reduction in capital needs, should the City adjust its sewer rates?

The City is currently conducting an update of the Sanitary Sewer Master Plan with council adoption scheduled for September 2004. The model assumes that the updated plan will require a 20% increase in capital expenditures over the next decade. According to the model results, rate increases prescribed in Table 1 would be sufficient to meet CIP requirements. If capital needs were lower than projected, then cash reserves for future capital would be higher.

⁴ An updated Sanitary Sewer Master Plan is scheduled for adoption in September 2004.

9. What action should the City take in anticipation of the potential consolidation of wastewater treatment services in Clackamas County and the potential decommissioning of the Kellogg treatment facility?

- a. Clackamas County Sanitary District #1 and the Oak Lodge Sanitary District recently completed a study of the cost of providing wastewater treatment services to the urbanized county over the next 30 years. Five alternatives were explored, ranging from keeping each of the three north Clackamas treatment facilities operating to closing facilities in Milwaukie and Oak Lodge and consolidating wastewater treatment at the Tri-City plant in Oregon City. Elimination of the Kellogg plant has long been a desire of the City of Milwaukie.
- b. Council recently approved a resolution supporting option five, which consolidates all treatment at the Tri-City plant in Oregon City and closes Kellogg and Oak Lodge facilities. A decision by all the parties is anticipated by the end of the year. This will allow adequate time to design, finance, and construct the necessary treatment capacity within the next two to three years, in keeping pace with growth of urbanized northern Clackamas County.
- c. Closure (decommissioning) of the Kellogg plant has obvious near- and long-term advantages to the residents of Milwaukie, including redevelopment potential of the downtown riverfront. This has many benefits including an increase in Milwaukie's tax base. As "host" of the proposed consolidated treatment plant, Oregon City has already asked for a variety of inducements and incentives in exchange for the land needed to build the largest treatment plant in the region. These include reduced rates, an annual cash payment, and investments in creating quality park/recreation facilities adjacent to the new, expanded plant.
- d. A financial contribution from the City of Milwaukie to help defray a portion of the cost of consolidation and removal of the Kellogg facility from the riverfront will probably be necessary to achieve consensus among the participating jurisdictions. Assuming continuing capital investment, the Kellogg plant is deemed to have a useful life beyond the next few years. Because of this, there are users for whom the decommissioning of Kellogg imposes a cost while benefiting the City. (The cost is the need to replace a plant that arguably has a remaining useful life.) By accepting some responsibility for bearing that cost, the City effectively meets one of the most potent arguments against elimination of the plant.

10. What is the impact on sewer utility rates of a contribution of \$5.0 million toward the closure of the Kellogg facility?

FCSG conducted an analysis of the impact to Milwaukie sanitary sewer rates to raise five million dollars. Three probable scenarios were developed.

- a. **A \$1.0 million payment would be made in each of the next 5 years, beginning in FY 2004/2005, for a total of \$5.0 million.** This treats the annual payment as a capital project using the cash reserves from the Capital Construction Fund. The results indicate that a total of over \$3.42 million of revenue bonds would be needed to fund this scenario over a term of twenty years. This figure includes the charges associated with issuing bonds. The

following table demonstrates the necessary increases over and above those needed to keep pace with inflation.

Table 2
Projected Rate Increases—Decommissioning the Kellogg Treatment Plant

	2004/05	2005/06	2006/07	2007/08	2008/09
Annual rate increases	1.46%	4.31%	5.57%	7.08%	6.91%
Cumulative rate increases	1.46%	5.84%	11.74%	19.65%	27.92%

- b. **One lump sum payment of \$5.0 million would be made in FY 2008/2009 from the projected reserve balance and the issuance of \$3.3 million in revenue bonds.** The results indicate that the rate increases would be the same for all years as illustrated in Table 2, except in FY 2008/2009 where an increase of 11.3% would be necessary to cover debt service payments.
- c. **One lump sum payment of \$5.0 million would be made in FY 2008/2009 through the accumulation of reserves without incurring debt.** Under this scenario, the sewer rates would need to be increased by 12.5% per year for the next four years to accumulate this amount. This approach might be termed the “self-financing” method. Under this scenario, the rates would be temporarily increased to cover this one-time expense and would generate large amounts of revenue following this lump-sum payment.

Conclusions

- 1. The shift from a fixed-rate billing structure to a volume-based structure has not generated excess revenue for the sewer utility. Customers who consume more water (discharging more to the wastewater system) have seen an increase in their sewer bills.
- 2. The utility should begin to “expense” depreciation and make deposits to its fund for future capital on an annual basis according to a depreciation schedule.
- 3. The current fiscal health of the sewer utility is good, but requires relatively small rate increases over the next five years to keep pace with inflation. The increases range from 1.46% to 4.31% and average just over 3% per year over the next five years.
- 4. In order to make a contribution toward the closure of the Kellogg plant and minimize impact on ratepayers, the utility would need to temporarily increase rates to fund a bond sale for this purpose. The bonds would be financed from the rates charged to users of the system.

Concurrence

The Engineering Department has coordinated these issues with the City Manager, the Community Development and Public Works Director, the Finance Department, and Public Works Operations.

Fiscal Impact

Impacts to the sewer utility will be in the form of rate increases needed to maintain revenue for approved operating and capital budgets and potentially to make payments toward decommissioning of the Kellogg treatment facility.

Workload Impacts

If rate increases are recommended, the Engineering and Finance Departments will manage the process. The billing department will continue to answer numerous customer inquiries about rates.

Alternatives

1. Provide staff with direction on sewer utility rates.
2. Take no action.

Attachments

- A. Sewer Rate Study, FCSG, June 2001
- B. Council Minutes from September 4, 2001
- C. Sewer Rate Update Report for FY 2002/03, FCSG
- D. Council Minutes from July 1, 2003
- E. Sewer Rate Findings, May 18, 2004, FCSG
- F. Issue Paper on Appropriate Levels of Reserves, May 27, 2004, FCSG
- G. Sewer Rate Billing Review, December 2002
- H. September 4, 2001 Staff Report
- I. October 2, 2002 Staff Report



August 21, 2001

Honorable City Council
City of Milwaukie
10722 SE Main Street
Milwaukie, OR 97222

Dear Honorable City Council,

FCS Group is pleased to provide the analysis and findings of the volume-based sewer rate study. The purpose of this study has been to evaluate the transition of residential sewer rates from a flat rate to a volume-based charge. In addition, we investigated and documented numerous administrative and policy issues related to such a transition. This study is a continuation of the sewer revenue requirement update completed in May of 2000. As such, it did not re-visit the levels of revenues needed. Instead, it has been based on a revenue-neutral transition in rate structure, overlaid by increases in rate revenues recommended in that earlier effort.

The volume-based sewer study consisted of several tasks.

Collect and Develop Customer Statistics – Customer statistics were provided by the City's Information Systems consultants, Springbrook Software. These were compiled to provide information including:

- ✓ Number of Accounts by Class
- ✓ Monthly Usage by Customer Class
- ✓ Number of Bills at each Usage Levels
- ✓ Individual Usage of Customers during a defined "Winter Period"

The data were also examined for validity by comparing the calculated revenues versus the actual revenues collected.

Analyze the Patterns of Customer Usage – Using the compiled customer data, each customer class' usage was diagramed and analyzed for patterns of use. The usage patterns were utilized to help answer several questions, such as: how valuable is it to switch to volume-based sewer rates; should the City use a customer's "Winter Average" versus his year-round usage; and what period of minimal usage is the appropriate "Winter Period"?

Utilize the Citizens Utility Advisory Board to Narrow Rate Options – Through a series of work sessions, we reviewed various rate options and policy issues and the pros and cons of each rate option with the Citizens Utility Advisory Board (CUAB). Materials such as issue papers and summary packets were sent to CUAB members prior to these work sessions for maximum efficiency. Copies of the issue papers developed and used in this process are included in Appendix A.

Present Rates to the City Council – Using the CUAB's recommendations, we presented a set of rate options to the City Council. A copy of the presentation packet is included as Appendix B.

SUMMARY OF FINDINGS

Through the process described above, a number of important issues were addressed leading to a recommended rate strategy. They include:

Validity of Customer Statistics

FCS Group received and analyzed two sets of customer data from Springbrook Software, the City's information systems consultants. The first set of customer data did not include customers who had zero water usage during any given bimonthly billing period. Preliminary analyses were developed by using this incomplete data set and normalizing it to fit known historical financial performance. The CUAB was uncomfortable with this approach, especially given the increased revenue risk which is inherent in volume-based rates, and through their direction, City staff worked with Springbrook to develop a valid and complete data set.

The second set of customer data was more complete. When the customer statistics was priced-out with the actual revenues, the difference was 1.15%. The deviation was not significant and was within our acceptable margin of error.

Patterns of Customer Usage

Volume-based sewer rates charge customers for the estimated amount of wastewater deposited in the system. In comparison to a fixed sewer rate, volume-based sewer rates increase equity among individual customers. Each customer is charged according to the demand they place on the system, and not the system average. Unlike the water system, which has water meters, there is no monitor for the exact amount of wastewater that a customer deposits into the system. Instead, a customer's sewer volume average is approximated from their water usage.

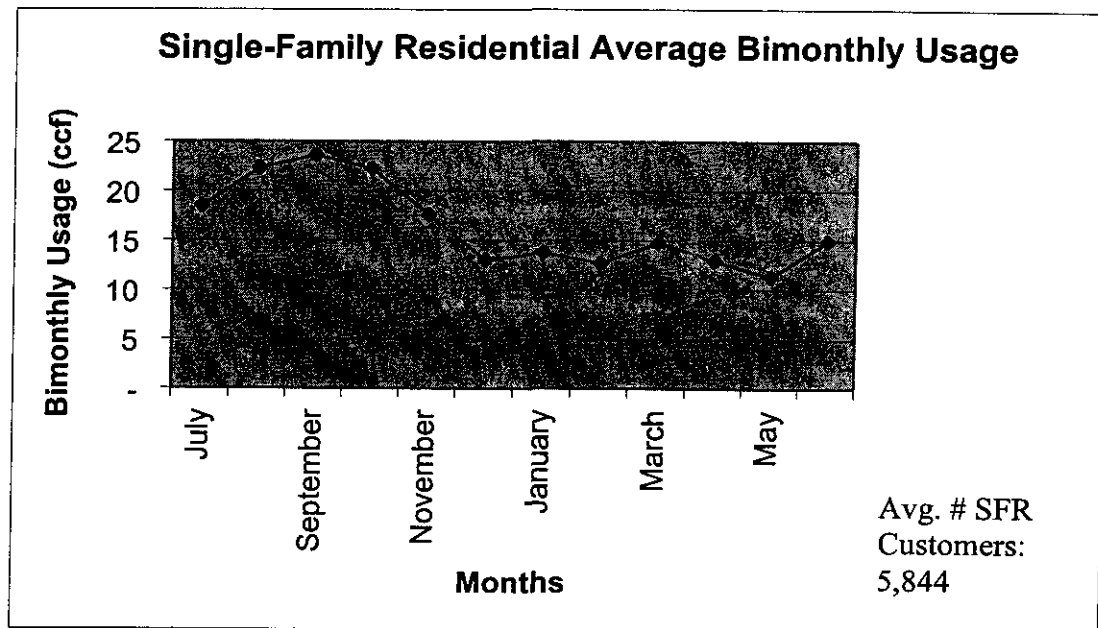
"Winter Average" sewer rates assumes a customer's winter usage is representative of the average wastewater flow for the entire year. This minimizes charging customers for irrigation or other outdoor water uses that do not enter the sewer system.

"Winter Averaging" also increases equity among customer classes. If all customers were billed based on their year-round usage, single-family customers, who as a class use a greater share of water for irrigation and other outdoor

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June 5, 2001
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consumption, would be overcharged for their wastewater disposal as compared to their sewage volumes.

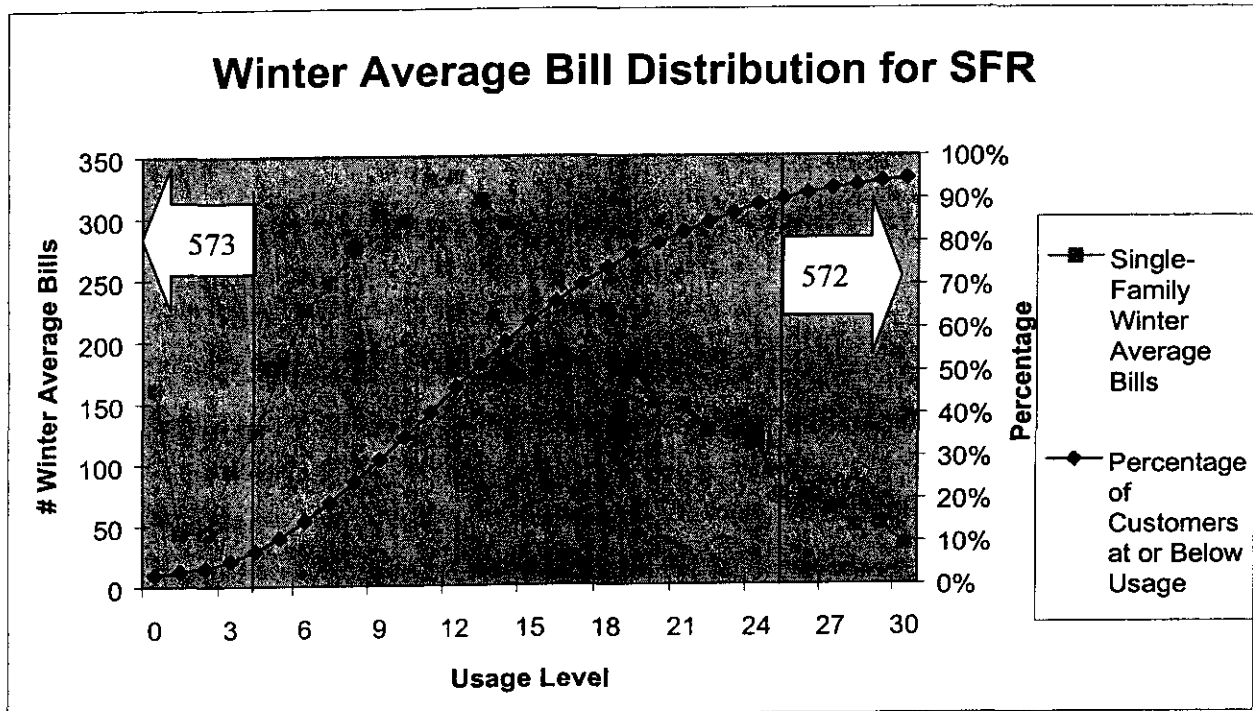
The "Winter Period" for "Winter Averaging" can be as short as a month to as long as six. Logically, we try to identify a period of very low stable usage and mark that period or series of months as the "Winter Average" period. After examining the graph below we identified the bimonthly billing periods ending from December to March as an appropriate "Winter Average" period. The CUAB concurred with this recommendation.



The customer statistics provided by Springbrook Software showed single-family and multi-family customers have peak water usage during the same summer months of the year. The main difference between Single and Multi-family customers is the magnitude of peak usage during the summer months. Whereas the average Single-Family customer may see their summer usage increase nearly 75% during the summer months, Multi-Family customers on average increase their summer usage by only 35%. Therefore, the case could be made that Multi-Family Residential customers could also be charged based on their "Winter Average" or based on year-round consumption. Both options were developed during this study. As noted below, the CUAB preferred to use "Winter Average" as the billing basis for all residential accounts.

In considering the transition to volume-based rates, customer impacts are an important element. While average rates and revenues remain constant, bills for individual customers can change profoundly. We examined the impact on individual customers should the City of Milwaukie switch to a "Winter Average" volume-based sewer rate. We found that while average winter use is between

fifteen hundred cubic feet (CCF), approximately ten percent of residential customers average more than 26 CCF and ten percent average less than six CCF during the "Winter Period" as defined above. The distribution of single-family customer averages is displayed below.



The graph displays the number of customers with "Winter Average" use at each usage level (line with square markers). The second line (line with diamond markers) displays the cumulative percentage of customers who average the level of usage or less. The graph shows 50% of the customers use approximately fourteen ccf or less. The average usage is approximately fifteen ccf. That means over half the customers would receive a discount with the volume based sewer rate structure versus the current fixed charge rate structure. At the same time, a significant fraction of customers use substantially more than the average, and could face substantial increases under a transition to volume-based rates.

Utilize the Citizens Utility Advisory Board to Narrow Rate Options

Applying the analysis we've performed, we presented several rate options to the Citizens Utility Advisory Board (CUAB). Some of the options included the

- current fixed residential charge,
- a rate structure with a minimum usage,
- and a single fixed charge with a single volume charge.

The option the CUAB preferred was a single fixed charge with a single volume charge. The CUAB liked the clarity and simplicity of this structure, while the goal of rate equity is achieved in the most straightforward manner. In general, several

issues concerned the CUAB about the implementation of volume-based sewer rates, and guided their judgment regarding rate options and implementation. The CUAB was concerned

- rates may lead to instability in revenue generation,
- there would be confusion about the impact of the new rate structure,
- and high-volume users would be burdened with a large portion of the costs without adequate notification.

The CUAB suggested the volume portion of the rate revenue be phased-in. With a current charge of \$36 dollars the CUAB suggested reducing the fixed charge by seven dollars to \$29 leaving the remainder of the revenue requirement to be generated from the volume charge. The CUAB recommended reducing the fixed charge by seven dollars each year until it reached \$15 per month with approximately a \$2.10 volume-charge. At that time, the City could re-visit this issue and evaluate whether further rate adjustments are appropriate.

Multi-family customers have a usage pattern similar to single-family but have magnitudes of peaking that suggest irrigation is a much smaller percentage of the peak usage. The CUAB was asked if multi-family customers should be segregated from single-family and charged on a volume basis much like commercial customers. The CUAB preferred to retain the same rate structure for single-family and multi-family residential to maintain rate clarity. Therefore, both single-family and multi-family classes will be charged on the proposed "residential" volume-based structures.

The CUAB also asked that the City Council take into consideration the administrative costs of implementing volume-based sewer rates. The first year would require an additional \$10,000 of onetime costs (not including the cost of this study) with approximately half of a full-time employee to administer the program from implementation onward.

The CUAB also recommended that the City promote assistance programs (i.e. conservation programs) to high-volume users, especially for those with limited financial resources.

Present Rates to the City Council

With the recommendations from the CUAB, the rates were presented to the City on March 19, 2001.

The results of this presentation can be summarized as follows:

- The City Council was impressed by the depth and breadth of review provided by the CUAB. The Council expressed general support for the CUAB recommendations.
- The Council was concerned about equitable treatment of customers with usage histories showing zero minimum volumes. They asked for options regarding zero volume accounts. A separate summary of this issue and available options has been provided.
- The Council also direct that the rate proposal submitted for adoption include scheduled rate increases identified in the May 2000 revenue requirements study.

In May of 2000, FCS Group recommended the City of Milwaukie implement a 7% increase followed by several 3.5% to 4.5% increases each year. The seven percent rate increase was implemented before the 2000-2001 fiscal year.

	2001	2002	2003	2004
Annual	7.10%	3.59%	3.78%	4.50%
Cumulative	7.10%	10.43%	13.81%	17.69%

In executing the series of increases for fiscal years 2002 and beyond, the increased rate revenue has been targeted for recovery through a higher volume charge, while the decrease in the fixed charge maintains the CUAB's recommended schedule of \$7 reduction per year until it reaches \$15, at which point a volume charge of \$2.10 would apply.

The resulting rate structures are displayed in the following tables.

June 5, 2001
Final Report**2001-2002 Rates**

RATE STRUCTURE	2000/2001 CURRENT RATES		2001/2002 (3.59% Increase) PROJECTED RATES	
	Fixed *	Volume (> 16 ccf)	Fixed *	Volume (per ccf)
Residential (Incl. MFR)	\$ 36.25	\$ -	\$29.00	\$0.70
Low-Income Residential	16.81	-	\$14.50	\$0.35
Commercial	36.25	2.30	\$29.00	\$2.50

*Fixed charge imposed per residential unit for residential and per account for commercial customers

In the 2000-2001 fiscal year commercial customers were given a 16 ccf allowance. This allowance would be discontinued under the new recommended rate structure.

2002-2004 Rates

RATE STRUCTURE	2002/2003 (3.78% Increase) PROJECTED RATES		2003/2004 (4.5% Increase) PROJECTED RATES	
	Fixed *	Volume (per ccf)	Fixed *	Volume (per ccf)
Residential (Incl. MFR)	\$22.00	\$1.40	\$15.00	\$2.10
Low-Income Residential	\$11.00	\$0.70	\$7.50	\$1.05
Commercial	\$22.00	\$2.75	\$15.00	\$2.95

The City could elect to adopt this entire rate transition package at this time, or solely adopt the 2001-2002 rates, now, and consider the subsequent revisions each year.

It has been a pleasure to work with the City staff, the CUAB, and City Council and we look forward to continuing the relationship in the future. Please feel free to call us with any questions, comments or concerns at (425) 867-1802.

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ATTACHMENT B

CITY OF MILWAUKIE CITY COUNCIL MEETING SEPTEMBER 4, 2001

CALL TO ORDER

The 1869th meeting of the Milwaukie City Council was called to order by Mayor Bernard at 6:05 p.m. in the City Hall Council Chambers. The following Councilors were present:

Larry Lancaster

Jeff Marshall

Staff present:

Mike Swanson,
City Manager

Tim Ramis,
City Attorney

Alice Rouyer,
Planning Director

Michelle Gregory,
Neighborhood Services Manager

Dennis Lively,
City Engineer

Jack Ostlund,
Associate Engineer

Jim Colt,
Police Captain

PLEDGE OF ALLEGIANCE

PROCLAMATIONS, COMMENDATIONS, SPECIAL REPORTS, AND AWARD

Mayor Bernard read a proclamation recognizing the month of September 2001 as *National Alcohol and Drug Addiction Recovery Month*.

CONSENT AGENDA

Mayor Bernard read the list of consent agenda items:

- A. **City Council Minutes of August 20 & 21, 2001;**
- B. **Resolution 26-2001 to Amend the City's Current Contract for the Juvenile Diversion Panel;**
- C. **Resolution 27-2001 Amending Resolution 17-2001 Setting Fees for Services; and**
- D. **Resolution 28-2001 Granting Consent to Clackamas County to Administer Dog Control and Licensing.**

It was moved by Councilor Marshall and seconded by Councilor Lancaster to adopt the consent agenda. Motion passed unanimously among the members present.

AUDIENCE PARTICIPATION

None.

PUBLIC HEARING

Volume Based Sewer Rate

Mayor Bernard called the public hearing on the proposed sanitary sewer rate charge to order at 6:09 p.m.

The purpose of this hearing was to consider public comment on the proposed volume based sewer charges.

Staff Report: **Ostlund** introduced Ed Cebron, Financial Consulting Solutions Group, Inc. (FCSG), consultant who worked with the Citizens Utility Advisory Board (CUAB) and staff on the proposed rate structure.

Cebron reviewed the background of the volume based rate structure. After adopting a sewer rate increase in February 2000, Council directed staff to determine if a volume based structure would be more equitable than the flat rate method. After reviewing policy and technical options with the CUAB, several key issues were identified: conservation should be encouraged and rewarded, billing based on residential customer winter usage is appropriate, and transition to a new structure should be phased in over 3 years. In addition to charging a more equitable fee, proposed charge is intended to create financial stability for the utility.

The CUAB considered patterns of customer usage and recommended the 3-year program with gradual increases. Customers will have the opportunity to evaluate their conservation options during that time. The impact on City revenues is neutral and is not intended to create untoward increases.

Councilor Marshall was concerned about accounting for administrative costs, including consumer education, related to implementing the new rate structure.

Cebron said additional funds, generated while customers adapt, can be used for additional administrative expenses. There will be certain start up costs related to researching customer records and developing administrative procedures.

Councilor Lancaster understood this was a very complex issue and would be concerned if rate increases were needed to support rising administrative costs. He asked if the impact of zero-volume usage had been determined.

Cebron said impact would be slight since research shows there are actually very few zero-volume customers. Those on wells will be locked into the system average until such time as they connect to the municipal system.

The group discussed the low-income residential rate, and **Cebron** believed applications were approved based on Clackamas County standards. There are currently about 100 low income customers.

Councilor Lancaster noted this is a pay-as-you-go program and all fractions are rounded down when bills are calculated.

Correspondence: None.

Public Testimony: None.

Carla Bantz, 4439 SE Pennywood Drive, Milwaukie, spoke in opposition to the increase. She believed the proposed rate structure would place a burden on families, and seniors would not see the rate decrease they anticipated. She was concerned additional residents would have their water shut off each month.

Sara, 6136 SE Monroe, Milwaukie, was opposed to the rate structure. Families with children would have high utility bills. She did not feel the public information accurately stated the percentage of increases.

Lee Cox, 11656 SE 48th Avenue, Milwaukie, supported the volume based rate structure. She believes the current flat rate subsidizes large families with high water consumption.

Councilor Lancaster felt the volume based rate proposal was the best compromise and discussed rising treatment costs.

Staff Comments: None.

Close Public Hearing: **Mayor Bernard** closed the public testimony portion of the hearing at 6:45 p.m.

Council Decision:

Councilor Marshall agreed volume based method seems to be the best compromise and is perceived as being overall the most equitable. It encourages the option to conserve. He suggested residents write the Clackamas County Board of Commissioners and urge construction of a new, more efficient treatment plant to replace Kellogg.

Councilor Lancaster said the Council will remain open to other community suggestions as the 3-year program is implemented.

It was moved by Councilor Lancaster and seconded by Councilor Marshall to adopt the resolution establishing sewer service charges. Motion passed unanimously among the members present.

RESOLUTION NO. 29-2001:

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
MILWAUKIE, OREGON, ESTABLISHING SEWER SERVICE CHARGES.**

OTHER BUSINESS

Recommendation to South Corridor Policy Group

It was moved by Councilor Marshall and seconded by Councilor Lancaster to forward the Milwaukie City Council recommended options to the South Corridor Policy Group for further study. Motion passed unanimously among the members present.

Other

Councilor Marshall expressed his concern with flaglot language in the Comprehensive Plan and suggested the Planning Commission review it.

Rouyer said the Planning Commission is scheduled to discuss flaglot standards at its September 25 meeting.

Mayor Bernard announced the City Council discussed updating the Community Goals at its September 1 work session and will meet with staff to discuss action plans.

ADJOURNMENT

It was moved by Councilor Marshall and seconded by Councilor Lancaster to adjourn the meeting. Motion passed unanimously among the members present.

Mayor Bernard adjourned the meeting at 6:50 p.m.

Pat DuVal, Recorder



Memorandum

To: Jay Ostlund, City of Milwaukie

Date: June 13, 2003

From: Jeanette Hahn, Bryan Kean, and Ed Cebron, FCS Group

RE: Sewer Rate Update for Fiscal Year 2003/2004

Background and Scope of Work

In 2001, FCS Group performed a sewer rate study for the City of Milwaukie that included recommendations for changing to a volume-based billing structure. As a result of that study's recommendations, the City adopted a 3-year graduated implementation, during which the fixed charges decreased as greater reliance on volume-based rate revenue was phased in. During each of these annual rate structure changes, a small increase was also built into the structure to ensure that the utility continued to collect revenues sufficient to cover full operating, capital, and policy-related costs and obligations.

For fiscal year 2003/2004, the City was scheduled to implement its final rate step, in which the fixed portion of the rate dropped to \$15.00 per unit (from \$22.00), and the volume charge increased to \$2.10 per hundred cubic feet (ccf) for residential and \$2.95 per ccf for commercial (from \$1.40 and \$2.75). This final step also included a roughly 4.5% increase in annual rate revenues, based on needs projected in the 2001 study.

During the past fiscal year, the City has become concerned that revenues are exceeding the rate study's original projections and that customer volumes may be higher than originally estimated, with the result being excess revenue generation. In the fall of 2002, FCS Group assisted the City with an audit of the billing system to ensure that the software was accurately calculating and imposing the sewer rates as intended. That audit found that there appeared to be no malfunction of the billing system, but that indeed, residential volumes billed exceeded those used to design the adopted rate structure, generating roughly \$200,000 in revenue in excess of original rate study projections. At this time, there is no explanation available as to why residential volumes are higher than history available at the time current rates were designed, but it can be assumed that the billing software itself is implementing the rate structuring properly.

In June 2003, the City hired FCS Group to conduct an update to the sewer rate study, as a follow-up to the volume-based sewer rate implementation conducted for the City in 2001. Our scope of work for this update included reviewing and validating current and budgeted financial and customer data provided by the City, forecasting rate revenue requirements based on updated operating and capital needs, restructuring sewer rates as needed to continue policy goals developed in 2001 and recover sufficient revenues, and recommend an updated strategy for the utility as it enters the 2003/2004 fiscal year.

Data Sources and Key Assumptions

Data for the analysis was provided by the City and included monthly revenue collections and volume reports across customer classes, sewer fund balances projected at the beginning of the upcoming fiscal year, proposed budget for the upcoming fiscal year, and the capital improvement program (CIP).

The data was used to update the 2001 rate model, including revenues by customer class, revenue requirements, CIP funding analysis, and key assumptions that drive future forecasts in the model. While the model is largely unchanged structurally, there were several assumptive changes made:

- o Interest earnings rate was reduced to 2%, reflective of current economic conditions.
- o Customer growth was reduced to 0.05% -- the level necessary to match to current SDC collections.
- o Debt interest rates were reduced to 4%, reflecting the current market.
- o Inflation was left at 3%. Given the interest earnings assumption of 2%, this is a conservative choice.
- o Customer consumption volumes, as reported during the twelve months between May 2002 and April 2003, were projected to remain the same in coming years, adjusted only for growth.
- o Assessments and loan payments tied to assessments were set to zero, reflecting the budget.

The revenue requirements forecast projects utility needs through fiscal year 2007/2008, based on the City's fiscal year 2003/2004 budget, escalated by inflationary factors. Several line items in the budget were altered for future years, based on discussion with City staff, in order to generate a realistic picture of future needs. (The detailed forecast is included as an attachment to this memo.)

Revenue Sufficiency Test Results

There are three categories of obligations we examine in our rate revenue requirement analysis:

- o Capital program funding,
- o Ongoing operating, maintenance, and administrative expenditures, and
- o Policy requirements.

Capital Program Funding: In its current CIP for 2003/2004 to 2007/2008, the City has identified \$1.7 million in needed infrastructure improvements. Our forecast indicates that all of those needs can be met by existing and future cash reserves, with the utility still maintaining a healthy reserve at the end of the forecast period (roughly \$4.2 million by 2008). At present time and throughout the forecast, the sewer utility has no debt repayment obligations. It should be noted that the utility will be undertaking a master planning effort in the near future, which will likely identify additional capital projects; the results of that new CIP will change this forecast.

Ongoing Operating Expenditures: For fiscal year 2003/2004, the City anticipates total operating expenditures of \$2.77 million. Based on projected rate revenues for the end of fiscal year 2002/2003 and assuming minor growth, we can anticipate \$2.81 million in rate revenues for the upcoming fiscal year. Thus, in the upcoming budget year, rate revenues are able to cover total operating costs. By the end of the analytical forecast period, we project that, without inflationary-level rate increases, costs will outstrip rate revenues. Throughout the forecast period, the utility is able to sustain its minimum working capital of 45 days of annual operating expenses (roughly \$350,000).

Policy Requirements: Finally, as described during the 2001 rate study, it is the City's policy to generate cash from rates on an annual basis to be used strictly for capital reinvestment in system infrastructure. That amount is linked to the utility's annual depreciation expense, which is nearly \$150,000 per year. This policy continues to be prudent fiscal management, giving the utility the capability to cash-fund capital improvements and demonstrate willingness and ability to repair, replace, and maintain capital facilities in a systematic, proactive fashion.

After assessing the sewer utility's ability to fund its currently identified CIP, existing levels of ongoing operating expenses, and policy of annually generating cash to reserve for future capital needs, our test of cash flow sufficiency indicates a need for moderate, inflationary-level rate increases over the next several years. Given the City's concerns about perceived "over collection" of rate revenue during the past year, we recommend that the utility forego the previously adopted 4.5% rate increase that was to become effective July 1, 2003. The implication of this decision is that, if operating costs are incurred as budgeted, the utility will not be able to fully fund its depreciation expense and dedicate it for future capital. (A little less than half that policy can be funded with no increase.) As mentioned, though, projected rate revenues for 2003/2004 exceed budgeted operating costs.

In subsequent years beginning with fiscal year 2004/2005, we find that annual rate increases on the order of 2% to 3% are needed to meet rising operating costs and the capital funding policy. To the extent budgeted expense inflation is lower, required rate increases will be a lower; conversely, if there is a future increase in the level of service (e.g., new personnel, higher level of maintenance, etc.) not implicit in the 2003/2004 budget, these rate increase may not be sufficient to cover those programs.

These projected increases after the upcoming fiscal year are stable and consistent with the projected 3% inflation rate. Given the funds available in the construction fund and the moderate CIP, this is a reasonable and expected result from the rate analysis. In comparison to the original projections from the 2001 study, actual revenues received are higher, but so too are expenses.

Rate Structure

While we are not recommending a rate increase for fiscal year 2003/2004, we believe the City should continue the phased-in restructuring of the actual rate structure, started in 2001. That approach ultimately targets a \$15.00 monthly fixed charge, versus the current \$22.00 charge, completing the conversion to a reasonable volume-based pricing structure.

However, because we're recommending that no additional rate increase be implemented while completing this restructuring, we needed to recompute the appropriate volume rates to accompany that \$15.00 fixed charge. Volume rates were computed to generate the same amount of revenue by class as the current rate structure. Under the rate structure displayed in the following table, the City will generate 59% of revenues from volume charges from the residential class, as opposed to 41% in the current structure. (In the commercial class, 96% of revenues are derived from the volume charges, versus 93% in the current structure.)

Recommended 2003/2004 Monthly Sewer Rates

<i>Customer Class</i>	<i>Fixed Rate per Month</i>	<i>Volume Rate per ccf</i>
Residential (Including Multi-Family)	\$15.00 per unit	\$1.96
Low-Income Residential	\$7.50 per unit	\$0.98
Commercial	\$15.00 per account	\$2.93

These rates are based on statistics taken directly from or derived from utility billing reports for the 12 months ending April 2003. Because no reports are available which show actual units billed (i.e., only the number of accounts were available), we derived the number billable residential units based on revenues received.

It is important to recognize that while these rates should result in a revenue neutral position for the utility as a whole (roughly \$2.81 million), individual customers will see changes in their bills, either an increase or a decrease from current rates, depending on their volumes. Customers with volumes lower than average will see a decrease to their bill, while customers with above average volumes will pay increased sewer bills.

Recommendations

Our recommended action plan focuses on three areas: rate revenues needed, rate structure, and future financial planning.

Rate Revenues: We recommend that the City sustain rate revenues at current levels for the 2003/2004 fiscal year. Projected rate revenues currently exceed budgeted operating expenses; though, without a rate increase in the upcoming fiscal year, the utility will not be able to fully fund depreciation as a cash contribution to its capital reserves. Nonetheless, with concerns about revenues realized at levels higher than originally projected and healthy fund balances on-hand, it is reasonable for the City to forego the previously adopted 4.5% rate increase for the coming fiscal year. In subsequent years, we project annually inflationary-level rate increases needed to fully fund operations and policy requirements. Should the City identify additional levels of service required in operations and maintenance or capital, it may need to revisit this forecast of rate increases.

Rate Structure: We recommend that the City continue to modify the sewer rate structure to lower the fixed charge to \$15.00 from the current \$22.00 rate. This step completes the transition to the volume-based rate structure approved by the City Council in 2001. We have recomputed the

appropriate volume rates to accompany that charge yet sustain rate revenues and existing, projected levels. (The recommended rates are displayed in the above table.)

Future Financial Planning: Given the utility's healthy reserves throughout the forecast period, we recommend that utility management identify needs for those reserves as it continues and plans its capital program. It is our understanding that the utility will be preparing a master plan in the coming year, which will inevitably identify needs which can be funded at least partially by cash on-hand. It should be noted that the utility's existing reserves are not excessive, in light of continued capital investments that will need to be made to the system.

It has been a pleasure assisting the City with this update. We look forward to supporting staff in presenting these findings at the City Council's July 1st meeting. Please contact us at (425) 867-1802 with any questions or comments regarding these findings.

(Analytical exhibits are attached.)

MINUTES

MILWAUKIE CITY COUNCIL JULY 1, 2003

CALL TO ORDER

The 1913th meeting of the Milwaukie City Council was called to order by Mayor Bernard at 6:00 p.m. in the City Hall Council Chambers. The following Councilors were present:

Councilor Lancaster

Councilor Loomis
Councilor Stone

Staff present:

Mike Swanson,
City Manager
Gary Firestone,
City Attorney
Alice Rouyer,
Community Development/
Public Works Director
Mary Rowe,
Human Resources Director

Paul Shirey,
Engineering Director
Jay Ostlund,
Associate Engineer
Jeff King,
Project Manager

PLEDGE OF ALLEGIANCE

PROCLAMATIONS, COMMENDATIONS, SPECIAL REPORTS, AND AWARDS

Mayor Bernard read a list of people involved with making the Centennial Festival success. Ed Zumwalt expressed his appreciation to Mayor Bernard and all those who helped put on a very organized event. He briefly discussed the riverfront event being planned for July 26 that will include music, dragon boat exhibition, and fireworks.

CONSENT AGENDA

It was moved by Mayor Bernard to move item VI.C – Cost of Living Adjustment for Non-represented Employees to the consent agenda. The motion died for lack of a second.

Councilor Stone had questions on consent item D – A Resolution Authorizing the City Manager to Sign Annual Purchase Orders Exceeding \$25,000.

It was moved by Councilor Lancaster and seconded by Councilor Stone to adopt the consent agenda, which consisted of:

- A. City Council Minutes of June 10 & 16, 2003;
- B. Bid Award for 2003 – 2004 Waterline Improvements, Phase 1; and
- C. Resolution No. 29-2003: A Resolution of the City Council of the City of Milwaukie, Oregon, Amending Resolution No. 29-2001 and Amending Sewer Service Charges for Properties Receiving Service from the City of Portland; Classifying the Fees Imposed by this Resolution as Not Subject to Article XI, Section 11B of the Oregon Constitution.

The motion to adopt the consent agenda passed unanimously among the members present.

AUDIENCE PARTICIPATION

There were no participants.

PUBLIC HEARING

None scheduled.

OTHER BUSINESS

Sanitary Sewer Volume Based Billing -- Resolution

Ostlund presented the staff report. In September 2001 Council adopted the sanitary sewer volume based rate structure. On January 21 of this year, staff provided an update on the rate structure. At that time, the City was seeing revenues in excess of what had been projected in 2001. Jeannette Hahn, Financial Consulting Solutions Group (FCSG), provided the consultant's report. He pointed out an additional resolution that would increase the minimum lifeline use.

Hahn provided an overview of the study and the 3-year transition to volume based sewer rates. The City started at a rate of \$29 per unit and is now currently at \$22 per unit. The final transition would drop the rate to \$15 per unit, complete the transitions, and have an appropriate proportionality in a volume-based rate structure. In that 3-year transition, there were revenue increases built into the rate changes. Not only did the fixed rate drop and the volume rate increase, but incremental, additional revenues are generated to stay on track with inflation. Residential living units are charged \$22 and \$1.40 per ccf of metered water volume. The earlier adopted rate of \$15 would go into effect on July 1, 2003 with a variable charge of \$2.10. Reliance is shifting to volume revenues. Implicit in that change is a 4.5% increase in revenues, so rates would generate more revenue than currently being collected.

FCSG conducted an analysis that looked at preliminary budgeted operating expenditures for the utility, ongoing capital expenditures through 2008, fiscal policy requirements, and any projected debt requirements to complete the capital program. FCSG recommends the Council not adopt the 4.5% rate increase. The sewer fund has

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a healthy balance with about \$2 million cash on hand. The user charges are consistent with the ongoing operating costs, labor, treatment, and maintenance. In the future, the City should assess how that fund balance is being used and how added levels of service and inflation are impacting operating costs. As costs increase, the City may see the need for annual inflationary increases which may in the future be 2% - 4%.

In terms of rate structure, Milwaukie already has the mechanism in place, and Hahn recommended the City complete its transition to a volume-based structure by assuming the \$15 fixed charge and calibrating the volume charge. She recommended after that to continue monitoring customer volumes. The 2001 projections were under what the City is actually collecting at this time. The billing system was audited and there did not seem to be any problem in the software. It turns out the customer volumes are actually higher, so the City is collecting more revenue. Currently, the City collects about 41% of its revenues from the residential class volume charges, and when the final step is taken, the number will increase to 59%. There will be a similar increase in the commercial sector. Monitoring customer patterns will continue to be important in this utility.

FSCG recommends a \$15 bi-monthly charge for a single-family house with \$1.96 per ccf. Low income residential would continue to see that discounted by half. The commercial rates would also be recalibrated slightly to make sure revenues would not increase. She provided a table showing how residents would be impacted. The average customer uses about 12 ccf, so under the current rate the bill would be about \$38.80. Under the recommended rates she just discussed, the bill would be about \$38.52. The average customer will not see a substantial change in his/her bill because the change is supposed to be revenue neutral. Completing the transition continues to have a positive impact on low volume users, and high volume users will see an increase in their bills. This will put the rates in the right proportions with a lower fixed rate and complete what was begun in 2001.

In summary, the recommended action is to forego the previously adopted 4.5% increase and amend the adopted rate structure; complete the rate restructuring; and continue to monitor the cash reserves. The upcoming master plan will identify capital improvements and replacements to be made to the system. The fund balance is a benefit to the customers as long as the City uses it to reinvest in and proactively maintain the infrastructure. Over time those cash reserves will fall as needs are identified. In summary the proposed rate structure is to drop the fixed rate to \$15 and to amend the previously adopted volume rate.

Councilor Lancaster said Hahn characterized the sewer fund as being healthy with a \$2 million balance for capital projects. He asked what projects are planned and what can be reasonably anticipated for future projects. These would be in respect to the decommissioning costs for the Kellogg Treatment Plant. There may be some accelerated costs, and Lancaster wanted to know if those were incorporated in future planning.

Ostlund said the capital projects were adopted in the capital improvement plan. The master plan will address those needs mentioned by Councilor Lancaster.

Swanson said the City is at the front end of a process that will take about eight months to determine wastewater treatment options in the entire north area. One of the three options being considered is the decommissioning of Kellogg. The problem is an entire process must be gone through to decommission a plant. The honest answer to Councilor Lancaster's question is probably "no", but those costs will be developed over the next year.

Councilor Lancaster raised the issue because there will be some significant costs related to decommissioning Kellogg. He recalled a healthy, unexpected treatment bill in excess of \$1 million. In terms of what is being considered additional revenue, perhaps the City should pay itself back for that unexpected bill before considering a rate cut. If he understands, the increase is not a function of the rate structure itself but a function of an unexpected increase in consumption. It still seems revenue neutral to him since usage is higher than expected. This is what generated the additional revenue. He sees no fault in the structure itself. Hahn said the average for the average for all users is 12 ccf, and Councilor Lancaster asked if there was any data that speaks to what the average is for customers with no history.

Hahn replied customers are charged a minimum of 4 ccf until history is established.

Councilor Lancaster understands the recommendation is to change the minimum to 12 ccf for all users.

Ostlund said the average for all users is approximately 14 ccf. The Citizens Utility Advisory Board (CUAB) recommended adopting 12 ccf as the rate people would pay under the old system with the flat rate. The City initially established the 4 ccf because it did not want to overcharge those residents. Staff is now finding actual consumption is higher. The 12 ccf is a compromise.

Hahn said it is common to set the minimum consumption at the average. The 4 ccf was done at the time in lieu of having better data. The 12 ccf is closer to typical usage.

Mayor Bernard said Councilor Lancaster brought up a good question about the surprise bill from the Service District for the update of the Kellogg Treatment Plant. He asked Rouyer how that was funded.

Rouyer said the City has an intergovernmental agreement (IGA) with Clackamas County that allows up to a 10-year repayment. The schedule is about \$135,000 annually. This year, since there was a little extra revenue, staff accelerated the payment up to \$400,000 while making a healthy transfer into the reserve account. As Councilor Lancaster indicated, Milwaukie needs to think about the future and what might happen to Kellogg. There are between 2 and 5 years left to pay on that extra capital payment.

Mayor Bernard understands this rate anticipates paying that bill off in 2 – 5 years at a lower rate. He asked the interest.

Rouyer said it is very low. This is an important question to ask each year -- should the money be put in the reserve and continue paying the low interest? This year, staff decided to accelerate the payment and put some in reserve.

Councilor Lancaster said it seems to him the rate structure is good and going in appropriate direction. The only differential is that people's utilization increased, and they are being charged for that additional volume. He thinks it is appropriate to keep the structure and use the additional revenue to accelerate the payoff of the unexpected bill, and anything beyond that is put in reserve for anticipated use. Milwaukie's economic future literally depends on moving that treatment plant, and the City needs to have funds to make sure that happens.

Mayor Bernard tended to agree with Councilor Lancaster. He has heard concerns from people that their bills are so much higher while the fact is they are actually being billed for what they use. Milwaukie's water rates are substantially lower than Portland. He suggested not changing the rates and putting money aside in the reserve fund to help aid in decommissioning the sewage treatment plant.

Councilor Loomis said during the Centennial Festival he heard complaints about the sewer charge and how it had increased. The whole idea was revenue neutrality. If more is coming in, and the City is trying to save money to get rid of a plant that is working, he does not think the citizens should have to pay extra without being asked. He would like to see Kellogg gone too. That money should be used to maintain the system, and citizens should not have to pay extra.

Councilor Lancaster said customers are not paying extra. They are paying for what they use. Based on the data he has seen, high users have been subsidized by everyone else. All that has been done is to restructure the billing process. The minimum charge covers those who use little water, and those who do not conserve and use high volumes indiscriminately are now going to pay for their share of this very precious commodity. Customers are not being charged more; they are being charged for what they use. If usage had been the same as tracked in the past, there would have been no additional revenue. It is strictly a result of increased utilization. That is appropriate revenue generation in his opinion.

Councilor Stone said they are indeed paying more; their bills are higher. She totally agrees that they are paying for what they use. They have a certain amount of control over that to offset their bills if they chose to be conservation minded. She actually likes the idea of volume-based rates. It is more fair, and she supports it.

Mayor Bernard called for a motion, and none was made. The sanitary sewer rate schedule will not be revised.

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It was moved by Councilor Lancaster and seconded by Councilor Stone to adopt the resolution altering the ccf rate for customers with no history based on the Citizens Utility Advisory Board recommendation to a rate of 12 ccf. Motion passed unanimously among the members present.

RESOLUTION NO. 31-2003:

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILWAUKIE, OREGON, AMENDING RESOLUTION 29-2001 AND 37-2001 RELATING TO SEWER RATES AND MINIMUM LIFELINE USAGE.

Mayor Bernard suggested applying the additional cash flow to the debt with funds reserved for future efforts to decommission the Kellogg Treatment Plant.

Councilor Lancaster suggested an article in *The Pilot* reminding people their rates are based on water use and encouraging them to conserve.

Firestone asked for a matter of clarification that Councilor Lancaster's motion was to adopt the resolution included in the packet relating to customers with no water data.

Councilor Lancaster said that was correct.

North Main Mixed Use Redevelopment Project Update

King provided the staff report updating the City Council on the status of the North Main Street Redevelopment Project. In April, the citizen selection committee recommended Peak Development for the project. Council accepted that recommendation and directed staff to proceed with negotiations. There are several components to the process: design, financing, and the memorandum of understanding that gives exclusive negotiating rights and outlines the duties and responsibilities of both parties.

At this point, staff has been meeting with Peak Development twice a month, and progress is being made on the design aspects. Several sessions are scheduled for July during which three or four design options will be considered. Staff is proposing to reconvene the North Main Developer Selection Committee in early August to provide input.

The City Council concurred with that proposal.

King said staff further proposes a community outreach program, including an open house, in September and October. The timetable is to carry out the legislative process from October through March with the Planning Commission, Design and Landmarks Commission, and City Council with construction starting about May 2004. Construction is anticipated to take about one year. King briefly discussed the retail elements of the project and potential for Metro grants.



Memorandum

Preliminary Draft
May 27, 2004

WS. 2 31

To: Jay Ostlund, City of Milwaukie
From: Jeanette Hahn, Nihat Dogan, and Ed Cebon, FCS Group
RE: Sewer Rate Update for Fiscal Year 2004/2005

Date: May 18, 2004

Background and Scope of Work

In 2001, FCS Group performed a sewer rate study for the City of Milwaukie that included recommendations for changing to a volume-based billing structure. As a result of that study's recommendations, the City adopted a 3-year graduated implementation, during which the fixed charges decreased as greater reliance on volume-based rate revenue was phased in. During each of these annual rate structure changes, a small rate increase was also built into the structure to ensure that the utility continued to collect revenues sufficient to cover full operating, capital, and policy-related costs and obligations.

In June 2003, the City hired FCS Group to conduct an update to the sewer rate study, as a follow-up to the volume-based sewer rate implementation conducted for the City in 2001. Our scope of work for this update included reviewing and validating current and budgeted financial and customer data provided by the City, forecasting rate revenue requirements based on updated operating and capital needs, restructuring sewer rates as needed to continue policy goals developed in 2001 and recover sufficient revenues, and recommending an updated strategy for the utility as it enters the 2003/2004 fiscal year. For fiscal year 2003/2004, the City implemented its final rate step, in which the fixed portion of the rate dropped to \$15.00 per unit, and the volume charge increased to \$2.10 per hundred cubic feet (ccf) for residential and \$2.95 per ccf for commercial.

In April 2004, the City engaged FCS Group to evaluate its sewer rates and the financial condition of the utility as a follow-up to the forecast of rate needs completed in 2003 update and as an ongoing check-up stemming from the conversion to volume-based sewer rates initiated in 2001. Key questions to be answered in this review include:

- Why does the City collect more revenues although the volume based rates were intended to be revenue neutral?
- What is the appropriate amount of reserves the utility should maintain?
- What would be the effect of a \$5.0 million payment to help Kellogg go away in the next five years?
- The City is in the process of updating its sewer comprehensive plan. If the utility's capital needs go down, should the City change its sewer rates, and why?

- Comparison of sewer bills before and after the rate change for three different residential homes.

More specifically, FCS Group's scope of work included

- o Updating the existing revenue requirements model to assess the current financial condition of the utility and forecasted rate needs.
- o Developing alternative financial and rate forecasts under different assumptions, such as the level of capital spending, potential Kellogg decommissioning, the level of reserves targeted.
- o Describing appropriate reserve levels to target and effect of those policies on the City's sewer rates (provided as a separate issue paper)
- o Preparation of a comparison of sewer bills for selected customer accounts.

Data Sources and Key Assumptions

The analysis used the following assumptions and data sources:

- o Beginning 2004/2005 Operating Fund balance is taken as \$2,975,000 per budget report dated April 30, 2004.
- o FY 2004-2005 beginning reserve for future capital (# 550) is based on year-to-date staff estimate (\$898,799) and projected transfers in the next two months (\$150,000). City staff also provided the beginning balance of the SDC Fund (# 545) (\$935,000).
- o 2005 capital improvement projects are taken from the Budget Proposal Report dated April 30, 2004. Capital improvement projects in 2006 and 2007 are kept as the same as 2003 rate study update. \$300,000 capital projects are assumed for 2008 and 2009. Project costs are inflated using 3% annual construction cost inflation.
- o Rather than using the budgeted rate revenues, the analysis used projected revenues. 2004 revenues are estimated based on 2003 actual revenues plus customer growth, plus 4.5% rate increase. Revenues in 2005 and thereafter are projected based on prior year revenues plus growth.
- o Expenditure projections are based on 2005 approved budget.
- o In order to avoid undue rate impacts while holding high levels of reserves, the analysis assumes that Kellogg loan would be paid from capital reserve. Hence it does not have a direct rate impact. Based on the utility budget, the City will pay \$350,000 in 2004/2005 as Kellogg Loan principal payments. Using the data from the prior update, it is assumed that the last principal payment for this loan will be \$150,000 in 2005/2006.
- o Depreciation expense in 2004 are assumed to be the same (\$134,000) as the prior rate study update.
- o Annual revenues from SDCs are assumed to be \$29,000.

- o Interest earnings rate was assumed to be 2%, reflective of current economic conditions.
- o Customer growth was kept at 0.05%.
- o Debt interest rates were assumed to be 4%, reflecting of the current market conditions.
- o Inflation was left at 3%. Given the interest earnings assumption of 2%, this is a conservative choice.
- o The expense budget is expected to grow with inflation.

The revenue requirements forecast projects utility needs through fiscal year 2008/2009, based on the City's fiscal year 2004/2005 budget, escalated by inflationary factors. (The detailed forecast is included as an attachment to this memorandum).

Results of Revenue Requirement Analysis

The revenue requirement analysis forecasts the amount of annual revenue that needs to be generated by sewer rates. The analysis incorporates operating revenues, operating and maintenance (O&M) expenses, capital funding needs and any other identified revenues and expenditures related to utility operations, and it determines the sufficiency of the current level of rates.

The total CIP needs for the FY 2004/2005 - FY 2008/2009 period is over \$2.0 million. Our forecast indicates that all the capital needs can be met by existing and future cash reserves, with the utility still maintaining a healthy reserve at the end of the forecast period.

Based on the utility budget, the City anticipates total operating and maintenance expenditures to be \$2.91 million for FY 2004/2005 fiscal year. Inflationary increases in O&M expenses are projected for the rest of analysis period.

FCS Group projected 2004/2005 revenues to be \$2.96 million. The analysis used this amount as the basis for projections rather than budgeted \$2.84 million. FY 2002/2003 year-end actual revenues are escalated by assumed growth rate plus the adopted 2003/2004 rate increase of 4.5% to arrive at the FY 2003/2004 revenue projections. Revenue projections for the upcoming budget period (FY 2004/2005) and thereafter are derived simply by escalating this amount by assumed annual growth rates.

Our projections indicate that the City would need to make inflationary adjustments (increases) in its sewer service rates (see Exhibit 1 below). This finding is consistent with our prior rate study update. The detailed spreadsheet analysis is presented in the Attachment A.

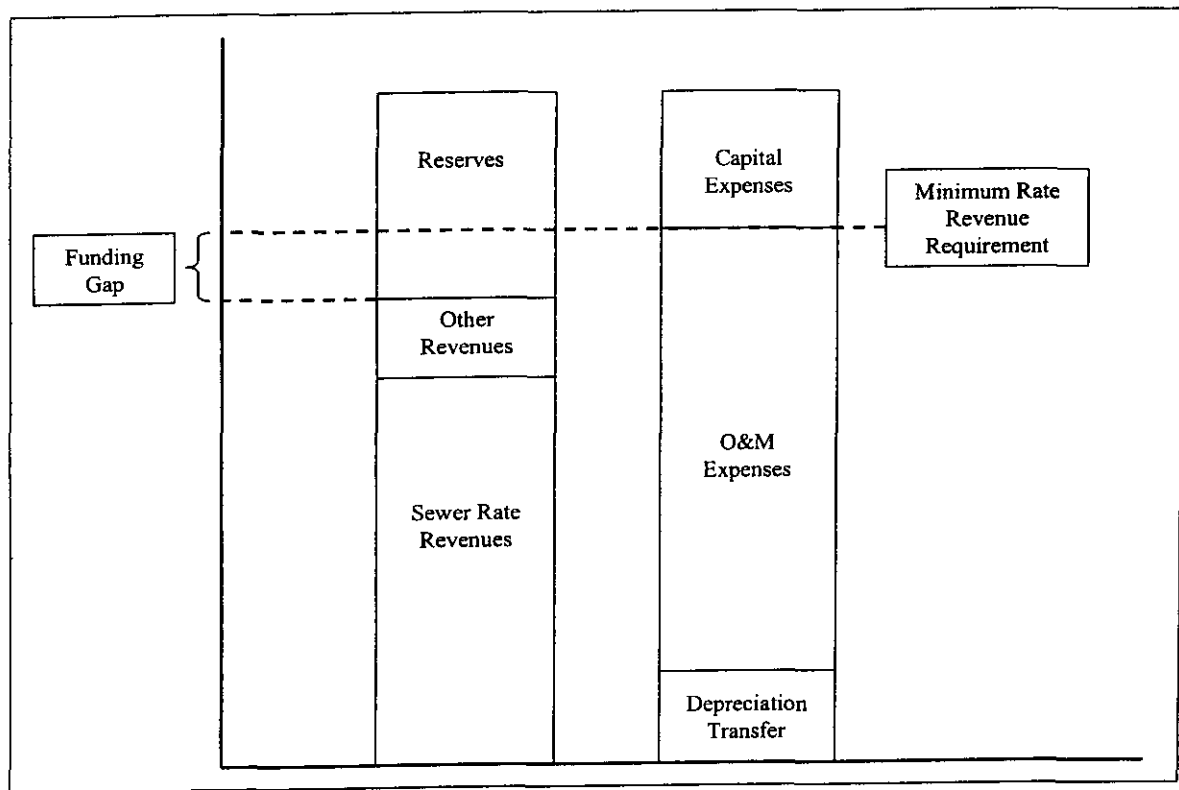
Exhibit 1
Projected Rate Increases

	2004/05	2005/06	2006/07	2007/08	2008/09
Annual Rate Increases	1.46%	4.31%	3.13%	3.11%	3.11%
Cumulative Rate Increases	1.46%	5.84%	9.15%	12.55%	16.05%

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These rate increases are driven by the assumed inflationary increases in the O&M expenditures and the City's policy of generating cash from rates on an annual basis to be used strictly for capital reinvestment in system infrastructure. That amount is linked to the utility's annual depreciation expense. This policy continues to be prudent fiscal management, giving the utility the capability to cash-fund capital improvements and demonstrate willingness and ability to repair, replace, and maintain capital facilities. As explained above, the utility has adequate reserves to finance its anticipated capital expenditures. The Exhibit 2 below demonstrates the utility's financial condition and our projections on a conceptual basis.

Exhibit 2
Projected Rate Increases



Projections under Alternative Scenarios

A. Lower Capital Improvement Program Costs than Anticipated

The sewer utility is currently undertaking a master planning effort, which will likely modify capital improvement projects assumed in the Base Case analysis. As part of this study, the City asked FCS Group to assess the impact of a lower capital improvement need on rates. For this purpose, we assumed that the total CIP would be 20% lower than the base case in every year throughout the projection period.

As explained above, the utility has enough cash reserves to pay for its CIP. In other words, the projected capital-financing plan has no direct impact on the projected revenue requirements and

service rates. Therefore, lower capital expenditures will not have a major impact on the projection results, except the cash reserve for future capital construction would be higher compared to the base case projections.

B. Payment of \$5.0 million over 5-years to help decommission the Kellogg Treatment Plant

The second scenario analysis requested by the City was to assess the impact of paying \$5.0 million over the next 5 years to help the Kellogg Treatment Plant's move. We evaluated this scenario using three alternative payment plans. In the first alternative, we simply assumed that the City would pay \$1.0 million a year for the next 5 years, starting in 2004/2005 fiscal year. These payments are treated as if they were additional capital projects. In other words, it is assumed that the utility's available cash reserves in the Capital Construction Fund and SDC Fund would be used to make these payments and any deficiency would be funded by issuing revenue bond.

The results of this analysis indicate that the utility's available cash reserves would not be adequate to pay for anticipated capital projects and these payments. Therefore, we project that the utility would need to issue a total of over \$3.42 million in revenue bonds to make these payments and finance the anticipated capital projects. It should be noted that the amount of projected bond issues also includes issuance costs, funding a bond reserve, and meeting annual coverage covenants through rates.

As can be seen in Exhibit 3, servicing these bond issues would necessitate higher rate increases than the base case scenario. The results of this scenario are presented in the Attachment B.

Exhibit 3
Projected Rate Increases – Decommissioning the Kellogg Treatment Plant

	2004/05	2005/06	2006/07	2007/08	2008/09
Annual Rate Increases	1.46%	4.31%	5.57%	7.08%	6.91%
Cumulative Rate Increases	1.46%	5.84%	11.74%	19.65%	27.92%

In the second payment alternative, we assumed that the City would make a \$5.0 million lump sum payment in FY 2008/2009. To make this payment, the City would have to issue a \$3.3 million revenue bond in FY 2008/2009. Under this alternative, projected annual rate increases are the same as the base case scenario with the exception of the last fiscal year. The City would need to increase rates by 11.3% in FY 2008/2009 to service debt payments. This large increase results in a 25.3% cumulative rate increase in the analysis period.

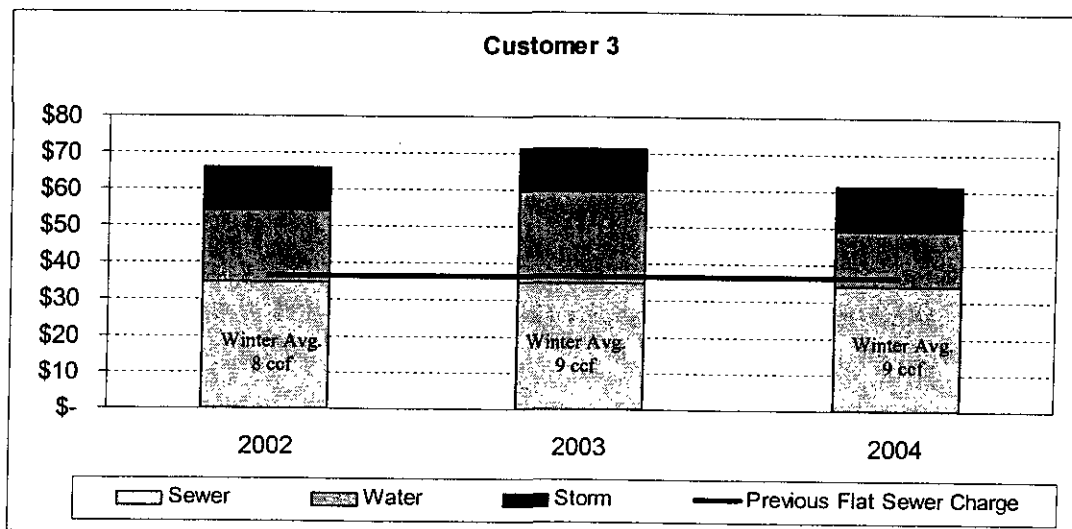
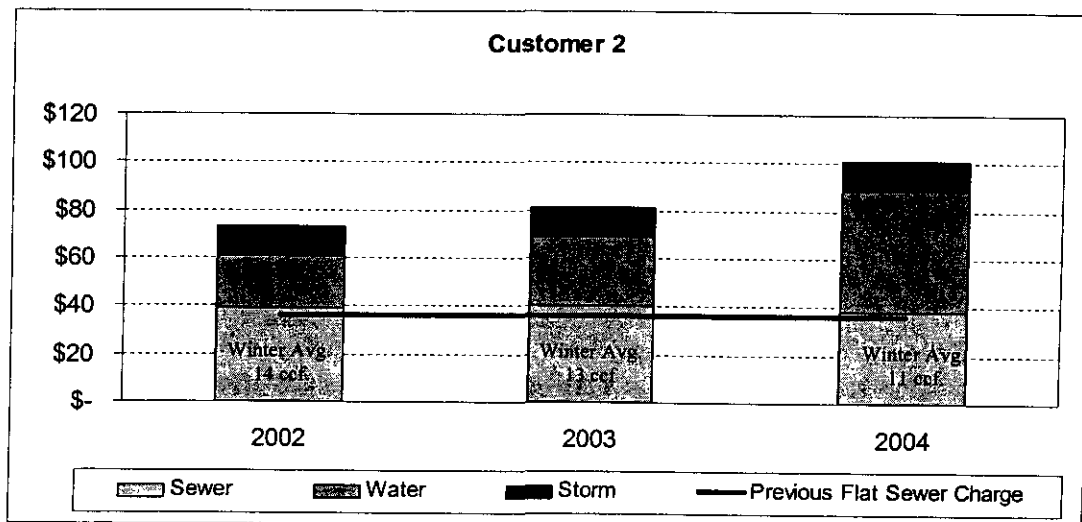
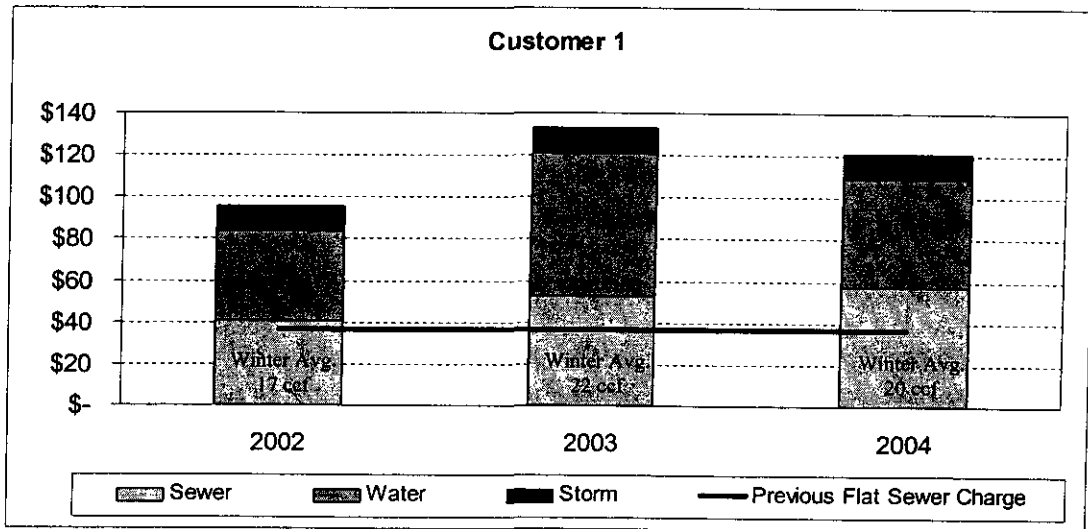
The last alternative we evaluated is a derivative of the above scenario. We assumed that the utility would try to accumulate reserves by larger rate increases than needed and use its accumulated reserves to make the \$5 million payment in 2008/09, rather than issuing debt. The City would need to increase its sewer rates by 12.5% per year over the next four fiscal years to accumulate adequate reserves. It should be noted that under this scenario the rates would need to be artificially increased and the City would be generating large amount of cash following the payment for decommissioning Kellogg, unless rates were recalibrated thereafter.

Customer Bill Impacts of the Volume Based Sewer Rates

The City also asked FCS Group to evaluate customer bill impacts of the volume based sewer rates using three sets of specific customer account information provided by the City. A comparison of sewer bills under the volume based rates and previous flat sewer charge for each customer account is provided in Exhibit 4 below.

As can be seen from the Exhibit, high water users pay a higher sewer bill under the volume based sewer rate structure. On the contrary, under the flat rate structure, everybody paid the same price regardless of water consumption. In other words, low water users subsidized high water users, although they placed a lower demand to the system. The volume based rate structure eliminates (or at least reduces) these subsidies and recovers cost of sewer service from customers more equitably.

Exhibit 4
Customer Bill Impacts of Volume Based Sewer Rates



Findings & Conclusions

The study's findings can be summarized as follows:

- Following the City's transition to the volume based rate structure, the City had concerns that the volume based rate structure generated more revenues than the rate study's original projections. In 2002, FCS Group audited the utility billing system to ensure that bills were accurately calculated by the system to address these concerns. The findings of this review process had been provided to the City as a memorandum. As part of this rate update exercise, City staff and FCS Group revisited this issue. It should be noted that a better assessment of the level of revenues is to compare revenues generated against utility's needs to operate as a financially viable entity. The key point is that level of revenues is necessary and appropriate to pay for the utility's operating and maintenance cost and to fund the depreciation expense for capital reinvestment in system infrastructure. Based on the 2003/2004 and 2004/2005 budgets and this study's forecasts, it can be concluded that the utility is in fact not over-collecting through rates.
- Appropriate reserve levels for the sewer utility vary based on specific circumstances under which the utility operates. A brief, conceptual discussion of potential factors that might affect appropriate reserve levels the utility should maintain is provided in a separate issue paper. However, experiences from similar utilities and industry standard provide a rule of thumb in determining the appropriate reserve levels. Usually operating reserves for wastewater utilities are set at 30-60 days of cash operating expenditures. In our rate analysis, we assumed a 45 days of cash operating expenditures as the minimum operating reserve target. We believe that, based on our experience, this is a reasonable assumption.
- Based on the available information and study assumptions documented above, the City would need to make inflationary-level increases to its sewer rates to cover its operating and maintenance costs and to satisfy its policy decision of generating cash from rates (equal to annual depreciation expense) to be used strictly for capital reinvestment in system infrastructure. This finding is consistent with FCS Group's prior rate study update conducted last year.
- The results of our analysis indicate that the projected rate increases under the Base Case scenario would not be affected, should the City's updated sewer comprehensive plan determines that its capital improvement needs are less than anticipated in the Base Case. Lower capital needs would only affect the amount of utility reserves used, and hence result in higher available reserves for future years.
- A \$5.0 million payment to help decommission the Kellogg Treatment Plant would result in higher annual rate increases. The timing and source of this payment will determine the required rate increases. Based on the three alternatives evaluated, we show that cumulative rate increases needed by 2008/09 range from 25.3% to 60.2%.
- The comparison of customer bills shows that the volume-based sewer rate structure improved the equity achieved among customers. High water users pay higher bills, and

low water users pay lower sewer bills as opposed to flat sewer rates. The current sewer rates are operating as intended.

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City of Milwaukie Wastewater Utility Issue Paper on Appropriate Levels of Reserves

Issue: As part of the rate study conducted by the Financial Consulting Solutions Group, Inc. (FCS Group) for the City of Milwaukie's (City) Wastewater Utility (Utility), the City requested an evaluation of the appropriate levels of reserves the Wastewater Utility should maintain. This issue paper provides a general discussion of purposes and use of reserves and issues to be considered while determining the appropriate levels of reserves.

Background and Analysis:

Prudent financial management of a utility involves an effective management of utility reserves and establishment of reserve policies. Key objectives of reserve policies can be summarized as follows;

- Minimization of reserve levels while limiting concurrent risk
- Managing reserves to mitigate adverse impacts on rates due to increasing or decreasing reserve levels, and
- Maintaining creditworthiness of the utility by avoiding any indication of weakening financial controls.

Utility reserves have two major components; operating reserves and reserves related to the management and construction of utility fixed assets (capital). Other types of reserves can also be appropriate, depending on specific legal requirements and policy objectives. These can include bond reserves as defined by bond ordinance, or capital replacement reserves as dictated by policy. This issue paper focuses on operating reserve and plant emergency reserves.

Operating Reserves

The purpose of operating reserve is to satisfy the utility's working capital needs and to provide a cushion for operating contingencies.

The working capital reserve provides for fluctuations in revenues and expenses, both in terms of short-term fluctuations and in terms of annual revenue cycles. The utility's revenue stream follows billing cycles and seasonal usage patterns, while expenditures are incurred on various bases; biweekly, monthly, and random. The variations in revenue (cash receipts) stream and payment streams each create a need for working capital

reserve, since they do not necessarily coincide. Major drivers of working capital need are as follows:

- **Revenue Cycle:** Variations in revenue due to billing periods and/or seasonal usage patterns. The City of Milwaukee's residential sewer customers are billed based on the winter average usage, whereas commercial accounts are billed based on actual usage. Therefore, seasonal variations in revenues should be limited, since residential accounts constitute a larger portion of the customer base.. Besides, the City's fiscal year starts in July. Revenues generated from commercial accounts should be higher in summer months. Hence the utility should normally start the fiscal year with higher revenues. This should provide a working capital cushion in the remainder of fiscal year, when monthly revenues are lower. Therefore, this component should not necessitate large working capital reserves.
- **Payroll Cycle:** Timing of fixed cash requirement for payroll as related to revenue cycle. Payroll cycle creates discrete cash requirements in semi-month intervals. To reflect this, cash reserves should be sufficient to accommodate the payroll pattern.
- **Wholesale Expense / Revenue Lag:** Delay between wholesale costs and corresponding sewer revenues.
- **Wholesale Cost Variability:** Variability of wholesale costs due to rate/payment structure and/or usage patterns. If payments to Kellogg for treatment services are tied to winter average usage, then revenues and wholesale expenses will follow a similar pattern. If this is the case, then a potential revenue decline will be offset by decline in expenditures. On the contrary, if the payments to wholesale purveyor are tied to actual flow or if they are fixed installment payments, then the utility's risk would be higher. Then higher reserves would be warranted for this component.
- **Debt Service Accrual:** Allowance towards next transfer into restricted bond repayment accounts
- **Miscellaneous Reserve Components:** Additional reserve levels appropriate for cash flow management

The operating contingency reserve is intended to provide a cushion against a poor performance against budget, either due to reduced revenues or increased expenditures. The availability of operating contingency reserve allows for more realistic financial planning, without undue conservatism in estimating revenues.

Plant Emergency Reserves

The plant emergency provides a hedge against a system failure at some anticipated level. A system failure could be failure of a major facility or a piece of equipment. It is not practical to reserve against major catastrophic events, such as earthquakes or structural failures, but more moderate (and potentially more frequent) events such as a pump station failure. The intent would be providing the funds needed on a short-term basis to respond to such extraordinary events. Some, but not all, plant failures are also protected by insurance. Therefore, the plant emergency reserve should focus on uninsured assets.

A reasonable plant emergency reserve level could be based on the cost of a major repair or replacement, or alternatively based on a percentage of fixed assets. The level of plant emergency to be protected against through reserves is ultimately a matter of judgment and policy. It will depend on the amount, age and conditions of system assets as well as other factors. For example, replacement of a pipe underneath a major highway would be a lot costlier than replacing a pump.

Other Considerations

Determination of appropriate level of reserves would also be dependent on other factors, such as availability of other funds that could be tapped for this purpose. These funds could be a citywide contingency fund or reserves maintained for other utilities. Maintaining separate reserves for each utility protects against cross-subsidy, thereby retaining rate equity for each utility. However, it also results in higher reserve targets, with more funds retained than are otherwise needed.

Reserves can be reduced by sharing risks among utilities. This does not require that reserves actually be consolidated into a single fund, but simply that individual reserve targets reflect the strength provided by the availability of cross-utility support. Under this scenario, cash shortfalls in one reserve could be funded through inter-utility loans, to be repaid from future rates.

Recommendation

The appropriate reserve levels can be determined by a detailed assessment of each reserve components explained above. This assessment would also consider overlaps between the components, potential counter-balancing impacts, and other sources that could be used if necessary. It would heavily rely on data availability and require a lot more detailed analysis than undertaken at this time.

However, experiences from similar utilities and industry standard provide a rule of thumb in determining the appropriate reserve levels. Usually operating reserves for wastewater utilities are set at 30-60 days of cash operating expenditures. In our rate analysis, we assumed a 45 days of cash operating expenditures as the minimum operating reserve target. We believe that, based on our experience, this is a reasonable assumption.

We did not assume a plant emergency and/or capital construction reserve.

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MEMORANDUM

TO: Jay Ostlund, P.E.
City of Milwaukie

FROM: Jeanette Hahn, Project Manager
Ed Cebon, Principal
FCS Group, Inc.

DATE: December 18, 2002

SUBJECT: Sewer Rate/Billing Review – Conclusions

The purpose of this memo is to describe the conclusions of our summary-level audit of sewer rates and billing data for the City of Milwaukie. The evaluation was requested to identify the potential cause for a discrepancy between projected and actual sewer rate revenue coinciding with the implementation of volume-based sewer rates.

This evaluation covered two areas to isolate the potential cause:

- The application of sewer rates within the utility billing software and
- The consistency of actual customer data versus statistics used to compute the rates in the original analysis.

UTILITY BILLING SYSTEM – The City provided a set of actual bills sent to customers in different classes for FCS Group to validate that the sewer rates were being applied correctly within the billing software. Of the six sample bills provided, all of them were computing sewer charges correctly. At this time, there is no reason to suspect that the billing system is inappropriately charging for sewer.

While the six sample bills were selected due to customer complaints and abnormal usage patterns, sewer rates applied are accurate. In most of the cases where individuals complained about high bills, their measured winter average consumption (December through March) was well above the estimated residential winter average of 13 ccf bimonthly per living unit.

Most notably, in the sample bill for Account 002939-000, the customer's reported winter average was 21 ccf, 8 ccf above the class average. Interestingly, December proved to be the month with the highest consumption for that customer all year, with 26 ccf of water used. The next highest water consumption posted was in August, with 21 ccf. Clearly, this is an unusual pattern and manifests itself noticeably in the sewer bill. Such anomalies can be caused by a slow leak or a large amount of household visitors during holidays. From a customer service standpoint, it may be worth following up on cases like this with the customer directly. Outside of a leak adjustment or some extraordinary circumstance, the sewer rates are nonetheless a valid representation of the costs incurred to serve that customer.

Account 16-2660-00's August-September bill is another case of an extraordinarily high sample bill that resulted in a customer complaint. In this case, however, despite the customer's complaint, it is clear that the sewer bill is not the culprit. The customer is being charged for a winter average consumption of 14 ccf bimonthly, comparable to the class average. However, the customer does have a history going back to 1996 of having water bills in the September-October period nearly double those from other bimonthly periods.

It appears that many of these individual complaints are the result of "sticker-shock." These customers have posted water consumption outside the norm for their class, and the intent of volume-based sewer rates is to shift cost recovery burdens to customers in proportion to their use of the utility system. Higher volumes yield higher costs of providing service. Under a fixed rate structure, these higher volume customers were subsidized by low-volume users. Nonetheless, it may be worthwhile to follow-up with customers, such as Account 002939-000 where the consumption pattern is truly unique, to see if there is a valid problem to correct.

CUSTOMER DATA CONSISTENCY – The City provided general billing reports for each billing cycle from July 2001 through October 2002, identifying the number of accounts billed and the amount of volume billed in each cycle. Extrapolating from revenue figures, City staff also identified the average number of living units billed, for purposes of checking revenues from the fixed charge.

Using this information, FCS Group compared the actual totals to the underlying data sets used to compute the sewer rates in the 2001 study. It is this test that identified the potential cause of the revenue discrepancy the City is experiencing.

In the rate study, detailed customer data was collected to use as the basis for allocating annual utility costs to customers and deriving rate components to recover those costs. The customer data used was based on year 2000 information and projected forward for 2002/2003 cost recovery. FCS Group worked with the City's information systems consultant to extract this data from the billing system, and after two iterations, a database of raw customer data was found that reconciled to actual rate revenues collected during the same period, within an acceptable margin of error.

Despite these checks, it appears the City's recent experience has deviated from the projected volume data generated through that study process. If the rate structure is based on a data set that is lower than actual performance, the rates themselves will over-collect the annual revenue need. Conversely, if the underlying data set is higher than actual performance, the rates will under-collect expected revenue.

The information in Table 1 compares the statistics from the raw databases used to generate rate structures during the study against data pulled from the City's summary reports. The key discrepancy exists with the volume data; the information used to set the rates appears to be lower than the volumes actually being billed. This means that the rate structure collects more revenue than is needed to meet the identified annual need by an estimated \$17,000 per month or roughly 7% per year, when priced out at the prevailing rates.

Table 1. Data Comparison and Estimated Revenue Impacts

Rate Component	Study Projections	Actual Performance	Difference (Actual - Study)	Estimated Annual Revenue Impact
Units/Accounts Billed	9,437	9,374	(63)	\$(8,250)
Volume Billed (ccf):				
Residential	656,372	755,802	99,430	\$139,202
Commercial	195,178	222,524	27,346	\$75,202
Estimated Total Revenue Impact from Projections:				
Annual Over-Collection (Under-Collection)				\$206,154
Monthly Over Collection (Under-Collection)				\$17,179

RECOMMENDED COURSE OF ACTION – Before altering the rates to account for the discrepancy, we recommend that the City review its billing data at the detailed account-by-account level once again, in the same manner utilized during the rate study. While an array of sample customer bills was reviewed as a part of this brief evaluation, which all seemed to be computing correctly, anomalies in the individual consumption records themselves could exist that would not be apparent in a small sampling of bills. Indeed, the 2000 database used to set the rates in 2001 did price-out closely to actual revenues reported during the historical period, which suggests it was a valid set of statistics at the time.

However, reviewing customer statistics at the individual account level is a prudent step at this juncture and can be a beneficial part of the complete transition to volume-based sewer rates. Table 2 shows a report format that would be ideal in conducting this detailed exercise. More direction on how to evaluate the account-level statistics can be provided, if the City chooses to perform the task in-house.

Table 2. Data Report Format Ideal for Evaluating Sewer Account Information

Acct #	Class	# Units	Metered Water Consumption (ccf)					
			Jul-Aug	Sep-Oct	Nov-Dec	Jan-Feb	Mar-Apr	May-Jun
1234-56	Single	1	16	17	15	12	15	16
<i>(Repeat for all accounts)</i>								

The City has one final step in fully converting its sewer rate structure, to become effective July 1, 2003. That final step places even more of the revenue need in the volume charges; therefore, the first two quarters of the year would be an opportune time to validate the underlying customer consumption records and make any necessary adjustments as a part of that final rate implementation in July. That rate adjustment includes the last of a series of revenue increases (4.5%) that may possibly be foregone, if the detailed data proves to be valid and the over-collection is permanent. If not, it is nonetheless apparent that the 2003/2004 planned sewer rates

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may need to be recalibrated to take into account actual, versus projected, customer usage patterns.

Please contact us at (425) 867-1802 with any questions.

ATTACHMENT H

WS. 2 47



To: Mayor and City Council

Through: Mike Swanson, City Manager
Scott Burgess, Community Development Director Pro-Tem
Dennis Lively, Engineering Director

From: Jack R. Ostlund Jr., Associate Engineer JRO

Subject: Volume Based Sewer Rate

Date: August 23, 2001 for September 4, 2001 City Council Meeting

Action Requested

Adopt the attached resolution to change from a fixed to a volume based sanitary sewer rate.

Background

At the Council's direction at the February 1, 2000 council meeting, staff has contracted with the Financial Consulting Solutions Group (FCSG) to identify and to document policy and administrative issues relative to the conversion from a fixed sewer rate to a variable volume based sewer rate charge. Last year when the Council adopted the rate increase you received testimony from customers who believe that flat rates are not equitable. In addition, you stated that the sewer rate should promote water conservation. Staff presented FCSG's analysis report to the Citizen's Utility Advisory Board (CUAB) at a meeting on February 7, 2001. The report included customer water usage statistics. The usage patterns were used to select conceptual methods of determining possible rates based on volume of sanitary sewer use. The CUAB provided staff and the consultant with guidance in structuring a new rate structure.

Discussion

The City currently has a split rate structure. The City uses a flat fee billing system where all residential customers pay the same fee regardless of the volume of sewage produced. Commercial customers pay a variable charge based on their water consumption. The equity issue involves the question of how fair is it to charge all

customers the same fee when it can be determined from water billings that there is a broad band of sewer usage among different residential and commercial customers. The water conservation issue is that customers may use less water if they have to pay for water that is actually entering the city's sanitary system and being treated at the Kellogg Sewer Treatment Plant or being diverted to the City of Portland sewer system.

The CUAB has concluded that the City, as the sewage provider, should take steps to establish an equitable and fair method of billing its residential customers. This would be based on a rate structure that includes a partial flat fee to cover the cost of the infrastructure and a variable volume rate based on the actual amount of sewage being produced by each customer. The variable portion would be determined using the water usage records provided by the City's water billing contractor Springbrook Software. Four winter months would be used to establish the rate, to avoid billing for water that is used for irrigation that never reaches the sewage treatment plant. The proposed rate structure for the next 3 fiscal years is shown in the following tables:

For commercial accounts, the charge will continue to be based on actual usage as determined each month. For residential accounts, including low-income residential accounts, the volume on which the monthly charge is based shall be the average monthly volume for the four-month period ending March 30 of each year. The volume rate would remain in effect from April 1 (immediately following the four-month averaging period) through March 30 of the following year.

All fractions of a 100 cubic foot (ccf) unit are to be rounded down.

Fiscal Year 2001/2002

# of CCF	Single-Family	Commercial
0	\$29.00	\$29.00
2	\$30.40	\$34.00
4	\$31.80	\$39.00
6	\$33.20	\$44.00
8	\$34.60	\$49.00
10	\$36.00	\$54.00
12	\$37.40	\$59.00
14	\$38.80	\$64.00
16	\$40.20	\$69.00
20	\$43.00	\$79.00
25	\$46.50	\$91.50
30	\$50.00	\$104.00

*Each CCF of Usage is billed

<u>RATE STRUCTURE</u>	<u>2000/2001 CURRENT RATES</u>		<u>2001/2002 PROJECTED RATES</u>	
	<u>Fixed *</u>	<u>Volume (>16 ccf)</u>	<u>Fixed *</u>	<u>Volume (per ccf)</u>
<u>Residential (Incl. MFR)</u>	<u>\$36.25</u>	<u>— -</u>	<u>\$29.00</u>	<u>\$0.70</u>
<u>Low-Income Residential</u>	<u>\$16.81</u>	<u>— -</u>	<u>\$14.50</u>	<u>\$0.35</u>
<u>Commercial</u>	<u>\$36.25</u>	<u>\$2.30</u>	<u>\$29.00</u>	<u>\$2.50</u>

*Fixed Charge is imposed per unit for residential, per account for commercial

<u>RATE STRUCTURE</u>	<u>2002/2003 PROJECTED RATES</u>		<u>2003/2004 PROJECTED RATES</u>	
	<u>Fixed *</u>	<u>Volume (per ccf)</u>	<u>Fixed *</u>	<u>Volume (per ccf)</u>
<u>Residential (Incl. MFR)</u>	<u>\$22.00</u>	<u>\$ 1.40</u>	<u>\$15.00</u>	<u>\$2.10</u>
<u>Low-Income Residential</u>	<u>\$11.00</u>	<u>\$0.70</u>	<u>\$7.50</u>	<u>\$1.05</u>
<u>Commercial</u>	<u>\$22.00</u>	<u>\$2.75</u>	<u>\$15.00</u>	<u>\$2.95</u>

*Fixed Charge is imposed per unit for residential, per account for commercial

Concurrence

Staff supports the CUAB recommendation to use the combination of flat fee and variable volume fee method of billing all City sanitary sewer customers. Staff will provide the necessary staff support to carry out this mission if the Council adopts the recommended rate change. Finance staff participated in development of this rate structure.

Fiscal Impact

This change in rate structure method is revenue neutral and does not include an increase in the total amount billed.

Work Load Impacts

Staff that would be required to administer the program is estimated to be ½ FTE Accounting Technician. The estimated cost of adding this employee is \$20,000 per

year (salary plus benefits). Engineering, sewer, and finance staff will bring Council a recommendation on this position within two months of adoption.

Alternatives

1. Adopt the recommended Flat Fee/Variable Volume Fee
2. Keep the existing rate structure
3. Ask Staff for more information

Recommendation

Adopt alternative 1

Attachment

1. Resolution

ATTACHMENT I

WS. 2 51



To: Mayor and City Council

Through: Mike Swanson, City Manager
Scott Burgess, Community Development Director Pro-Tem
Dennis Lively, Engineering Director

From: Jack R. Ostlund Jr., Associate Engineer

Subject: Volume Based Sewer Rate

Date: September 11, 2001 for October 2, 2001 City Council Meeting

Action Requested

Adopt the attached resolution for the adoption of the elements of sanitary sewer consumption based rates.

Background

At the Council's direction on September 4, 2001 council meeting, Council adopted a volume based sanitary sewer rate structure. This structure partially charges customers based upon their volume of sewage discharged. Staff is working towards details of implementing this adopted structure.

Discussion

Staff is currently working on implementation issues for this rate structure. Staff requests a January 1, 2002 implementation date for this rate structure. We feel that three to four months will be necessary to test software, hire staff, and dissect scenarios in the transfer to the new structure.

The City currently has a number of customers that have unique situations and have circumstance that make the billing process difficult under standard operations. These cases are as follows:

Customers with No Water Usage Data (New Accounts/Change in Accounts/No Data)

Issue: There are four types of customer that could be affected by this issue:

- New Accounts,
- Changes in Accounts,
- Non-City Water Customers (Well-users, Non-City Customers such as Clackamas River Water District, Oak Lodge Water District, and City of Portland Water users),

These three types of customers are characterized by an absence of data. For these customers we recommend the City charge them the customer-class system average (14 CCF). Staff recommends re-visiting this decision in two years to re-evaluate the equity of this decision.

- Zero Usage Customers.

Unlike new, change in accounts, and well-users, existing customers with zero usage during the winter months do have a usage history. They were part of the system but have a "Winter Average" that is not indicative of their average wastewater discharge. For a variety of possible reasons, the customers did not occupy their homes during the defined winter period and have no sewer usage. The rest of this paper will focus on the policy alternatives the City can implement to define a "Winter Average" for these customers.

When volume-based rates are implemented zero-usage customers present a problem because the billing system for wastewater service would be based on each customer's previous year winter usage. Since these customers have a "Winter Average" that is not indicative of their sewer wastewater usage, we must explore other alternatives for estimating or obtaining average wastewater use. The alternatives for billing customers with no "Winter Average" history are listed below.

Alternatives

- Base the charge on the system-wide average:
- Base the charge on a minimal lifeline charge such as two hundred cubic feet (CCF) for a single-family customer
- Only charge customers the fixed charge.

Analysis

The first option would be to base the charge on a system-wide average is simple to calculate and administer. This method does not give customers who vacation during the winter months a discount for their absence nor does it significantly overcharge

customers who do not establish a "winter average". Customers with zero winter usage or no "Winter Average" history will be charged a rate consistent with their expected use, although individual customers may be overcharged or undercharged.

The second option would be to charge customers a minimum lifeline usage amount such as four CCF for a bimonthly period. This would prevent most customers from being overcharged. At the same time this would also prevent customers from "manufacturing" a "Winter Average" by leaving a slight drip or asking neighbors to turn on outside taps or occasionally flush a toilet. In opposition, this method may not fully account for the usage of customers, at 75 gallons per day.

The third option would be to charge all zero-usage and no-history customers only the minimum charge. This method would assume their discharge is zero until an average is established. In a few cases such as customers who leave during the winter months, the "winter average" may never be established. This method will never fully account for the usage of such customers.

Due to the large number of customers in the City with zero-volume usage during the winter months or no volume history, there would be an impact on the rates based on the policy that the City chooses to adopt that might effect the neutral revenue target.

Recommendation

Any of the options are viable based on the philosophy and direction the City wishes to take. Staff recommends using *Option Two*, upon our experience these residents typically are senior citizens with low usages.

- **Customers with no flat fee charge during non-residing months**

Currently customers that do not reside at their residence for part of the year and, have their water service "closed", do not have to pay any bill to the city for services. The current system is made up of both a flat and variable fee. The flat fee is meant to recover the cost of maintenance, repair, and replacement of the cities collection system. The variable fee recovers the cost of treating the wastewater that is produced. Staff recommends that all customers should have to pay, as a minimum, the flat rate in all months of the calendar year. This would be to recover and share the costs, other than treatment, of maintaining the collection system.

Fiscal Impact

This change would more equitably recover the cost of maintenance, repair, and replacement of sanitary sewer infrastructure.

Work Load Impacts

The change would have little effect in the work load of staff.

Alternatives

1. Adopt the recommended charge of flat fee payment
2. Keep the existing rate structure

Recommendation

Staff recommends using alternative 1, minimum charge would be that to support infrastructure maintenance, repair, and replacement.

- **Hiring a ½ time employee to for rate structure**

As was mentioned in the adoption memos, it will be necessary to hire a ½ time employee to aid in the implementation and maintenance of the new rate structure.

Fiscal Impact

The estimated cost of adding an additional ½ time employee is \$20,000 a year (salary and benefits). This cost is built into the adopted rates.

Work Load Impacts

Hiring of ½ time employee is necessary.

Recommendation

Authorize city financial staff to hire an additional ½ time employee